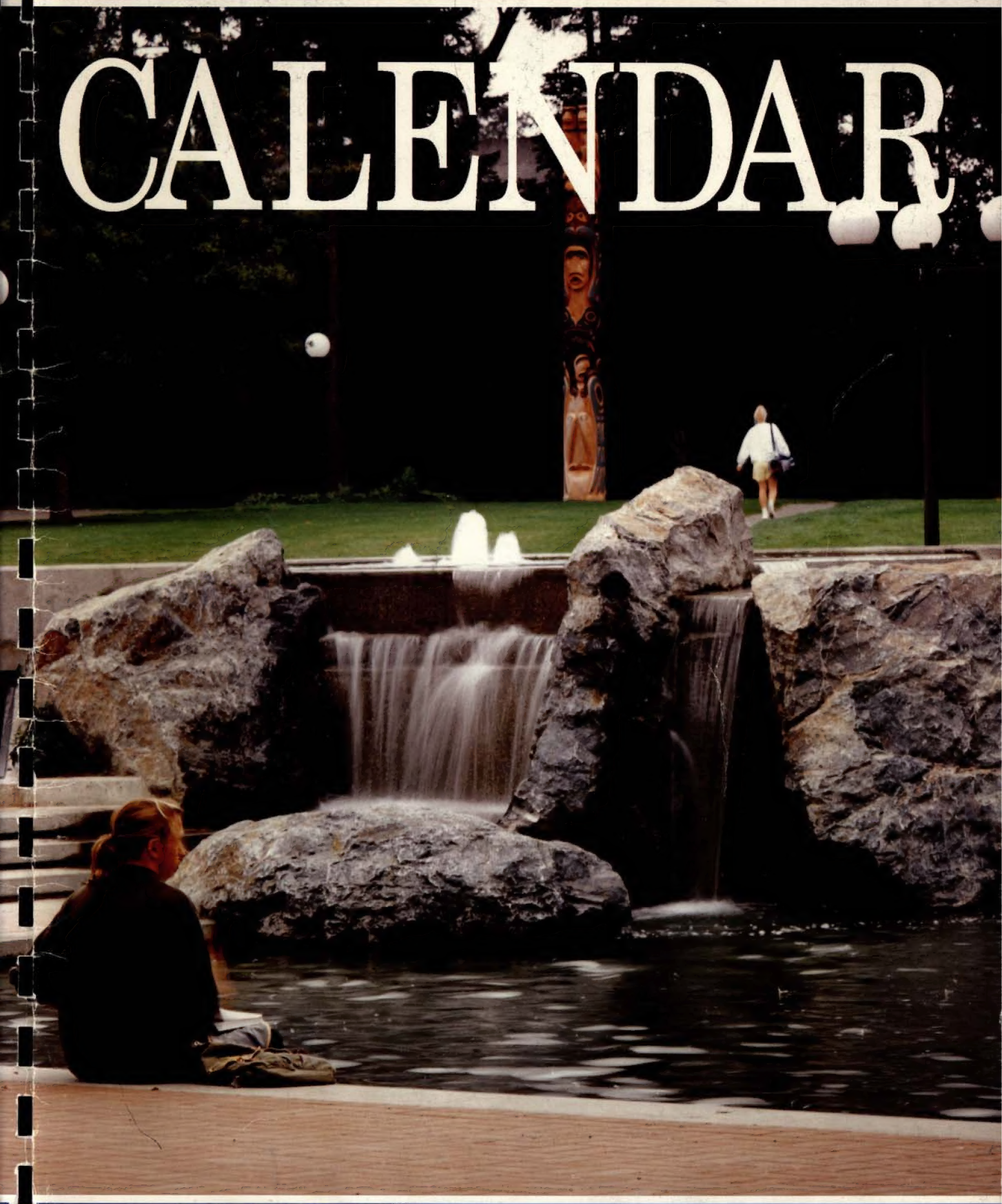
UNIVERSITY OF VICTORIA 1991–92

CALENDAR



OFFICE OF THE UNIVERSITY SECRETARY VICTORIA, B.C., CANADA

INQUIRIES

The University's telephone number is: (area code 604) 721-7211. (FAX number is 604-721-8653.)

The University's mailing address is: University of Victoria, Box 1700, Victoria, British Columbia, Canada, V8W 2Y2.

Inquiries from prospective students in regard to the following should be directed to the officer or office shown.

Admission and Information About Programs Offered
All Faculties, Schools and Programs, except Law, Graduate Studies:
Director of Admission Services

Faculty of Law:
Dean, Faculty of Law

Faculty of Graduate Studies:
Dean, Faculty of Graduate Studies

Advice About Course Selection
Advising office of the faculty concerned

Counselling (non-academic)
Director, Counselling Services

Financial Aid
Student Financial Aid Office

Day Care
Coordinator, Day Care Services

Health Services
Director, Health Services

Housing and Residence Accommodation
Manager, Housing and Conference Services

Parking Permits
Manager, Traffic, Security and Motor Pool

Public Relations
Director, Public Relations and Information Services

Summer Studies
Director, University Extension & Community Relations

Textbooks
Manager, Bookstore

Inquiries from other persons in regard to the contents of this Calendar or the University in general should be directed to the University Secretary.

OFFICE HOURS

The offices of the University are open throughout the year from 8:30 a.m. to 4:30 p.m., Monday to Friday, except on statutory holidays.

UNIVERSITY APPLICATION DEADLINES

Application for Winter Session

No assurance can be given that applications received after the deadline dates can be processed in time to permit registration in the Winter Session. (This does not apply to Law — applications received after March 31 will not be considered.)

February 28	Faculty of Education (professional year and Physical Education programs only). School of Social Work.
March 31	Faculty of Law; School of Child Care.
April 30	Health Information Science; School of Nursing.
May 31	Applications outside Canada — programs other than those listed above. Faculty of Education; Faculty of Engineering; Faculty of Graduate Studies.
June 15	Applicants in Canada — programs other than those listed above.
November 30	Second term courses — for third and fourth year students only (not applicable to students in attendance in the first term).

Application for Summer Studies

February 28	Courses beginning in May (first admission).
March 31	Courses beginning May (reregistration).
April 30	Courses beginning in July (not applicable to students taking courses beginning in May).

Application for Graduation

July 1	Fall Graduation.
December 1	Spring Graduation.

N.B. Each of the above dates is a fixed due date. If a fixed date falls on a holiday, Saturday or Sunday, the nearest following day of business will be considered as the deadline.

NOTICE CONCERNING FEES

It is expected that it may be necessary to increase fees above the levels shown in this Calendar. Notification of any required changes in the current fee schedules will be given as far in advance as possible by means of a supplement to this Calendar.

Other University Publications of Interest to Prospective Students

Admissions Handbook and Mini-Calendar
Provide information on the University, programs and courses offered and procedures to follow in seeking admission. Available from Admission Services.

Preview Newsletter
A bulletin announcing changes in admission regulations or procedures, new programs and items of general interest. Sent to all B.C. high schools and colleges bimonthly.

Transfer Guide: B.C. College-University
Lists B.C. college courses and their University of Victoria equivalents. Available from Admission Services.

Summer Studies Calendar Supplement
Lists offerings available in the period May through August. Available from the Director, University Extension & Community Relations.

University Extension Supplement
Lists credit offerings available in the late afternoon and evening. Available from the Director, University Extension & Community Relations.

University Extension Calendar
Lists nondegree programs; issued in the fall and spring. Available from the Director, University Extension & Community Relations.

UNIVERSITY OF VICTORIA

Calendar
1991-92

The University of Victoria operates under the authority of the *University Act* (R.S.B.C. 1979 c. 419) which provides for a Convocation, Board of Governors, Senate and Faculties. The *University Act* describes the powers and responsibilities of those bodies, as well as the duties of the officers of the University. Copies of this Act are held in the University Library. Persons who wish to purchase copies may do so through the Printer to the Queen's Most Excellent Majesty, The Parliament Buildings, Victoria, British Columbia, Canada.

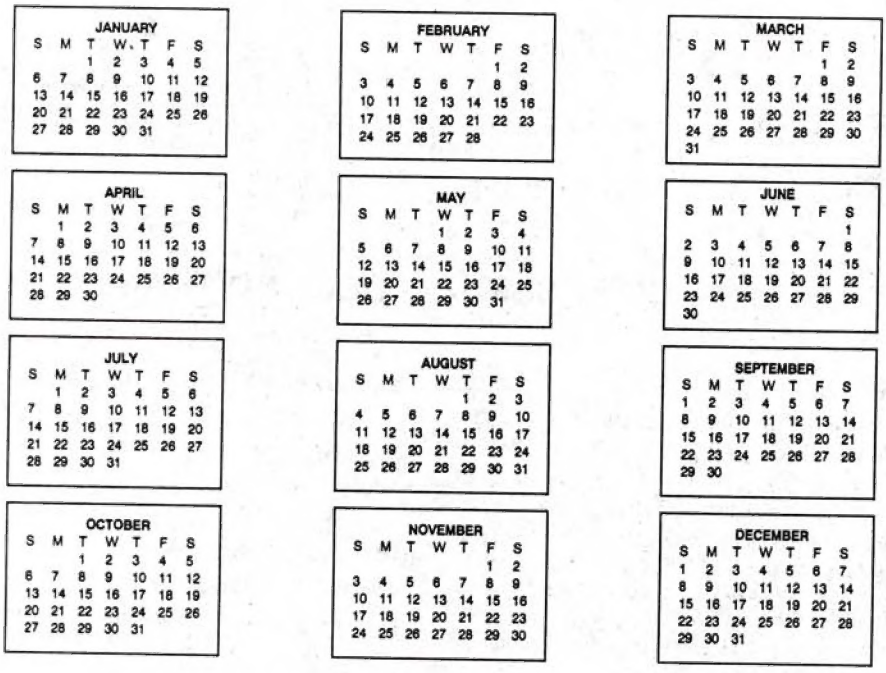
The official academic year begins on July 1. Changes in Calendar regulations normally take effect with the beginning of the Winter Session each year. Nevertheless the University reserves the right to revise or cancel at any time any rule or regulation published in this Calendar or its supplements.

The Calendar is published annually in the Spring by the University Secretary under authority granted by the Senate of the University.

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SESSIONAL CALENDAR
1991



WINTER SESSION — FIRST TERM

September 1991

2 Monday — Labour Day.*

Orientation registration for first-year students. All first-year students are expected to attend this Orientation Program, to be held on the UVic campus. This program is for first-year students only.

3 Tuesday — Beginning of all Professional Years in Education.

No registration in the Professional Years in Education will be accepted after this date.

Only day for registration in Faculty of Law.

Last day of registration (except as above).

4 Wednesday — First term classes begin (except as above).

Senate meets (if required).

13 Friday — Last day for course changes in Faculty of Law.

17 Tuesday — Last day for 100% reduction of tuition fees (see page 22, paragraph 8). Last day of period for adding courses which begin in the first term.

30 Monday — Last day for paying first term fees without penalty.

October 1991

2 Wednesday — Senate meets.

8 Tuesday — Last day for 50% reduction of tuition fees (see page 22, paragraph 8).

14 Monday — Thanksgiving Day.*

31 Thursday — Last day for withdrawing from first term courses without penalty of failure. All forms must be deposited by 4:00 p.m. on this date, at Records Services. *Failure to pay full fees (due on September 30) will result in automatic cancellation of registration.*

November 1991

6 Wednesday — Senate meets.

11 Monday — Remembrance Day.

Reading Break (except Law).*

12 Tuesday — Reading Break (except Law).*

13 Wednesday — Reading Break (except Law).*

30 Saturday — Fall Convocation.

December 1991

4 Wednesday — Last day of classes in first term (except for Faculty of Human and Social Development, Faculty of Law, and Professional Years in Faculty of Education, to be announced).

Senate meets.

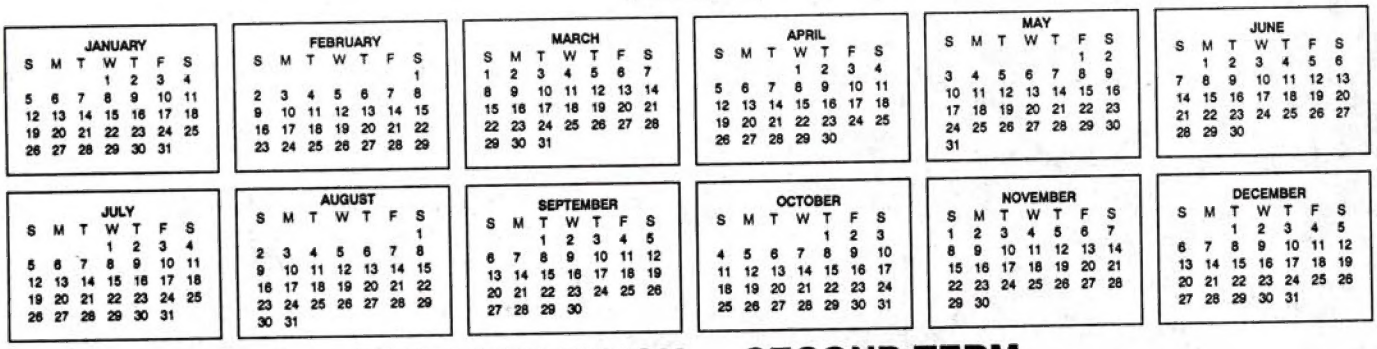
6 Friday — First term examinations begin (except for Faculty of Human and Social Development, Faculty of Law, and Professional Years in Faculty of Education, to be announced).

20 Friday — First term examinations end. End of first term, all faculties.

25 Wednesday — Christmas Day.*

26 Thursday — Boxing Day.*

SESSIONAL CALENDAR
1992



WINTER SESSION — SECOND TERM

January 1992

1 Wednesday	New Year's Day.*
6 Monday	Second term classes begin in all faculties. Registration in person for all new graduate students.
8 Wednesday	Senate meets.
15 Wednesday	Last day for course changes in Faculty of Law.
19 Sunday	Last day for 100% reduction of second term fees (see page 22, paragraph 8). Last day for adding courses which begin on January 6. All change forms must be deposited by 4:00 p.m. on this date, at Records Services.
31 Friday	Last day for paying second term fees without penalty.

February 1992

5 Wednesday	Senate meets.
6 Thursday	Awards Recognition Ceremony.
9 Sunday	Last day for 50% reduction of tuition fees (see page 22, paragraph 8).
17 Monday	Reading Break (Faculty of Law only).
18 Tuesday	Reading Break (Faculty of Law only.)
19 Wednesday	Reading Break (all faculties).*
20 Thursday	Reading Break (all faculties).*
21 Friday	Reading Break (all faculties).*
28 Friday	Last day for withdrawing from full year and second term courses without penalty of failure. All forms must be deposited by 4:00 p.m., on this date, at Records Services. *Failure to pay full fees (due on January 31) will result in automatic cancellation of registration.*

March 1992

4 Wednesday	Senate meets.

April 1992

1 Wednesday	Senate meets.
3 Friday	Last day of classes in the second term (except for Faculty of Human and Social Development, Faculty of Law, and Professional Years in Faculty of Education, to be announced).
6 Monday	Examinations begin (except for Faculty of Human and Social Development, Faculty of Law, and Professional Years in Faculty of Education, to be announced).
17 Friday	Good Friday.*
20 Monday	Easter Monday.*
25 Saturday	End of examinations for all faculties except Law. End of Winter Session (except for Professional Years in Faculty of Education, see below).
30 Thursday	End of examinations, Faculty of Law.

MAY-AUGUST 1992
(see Summer Studies supplement for complete dates)

May 1992

1 Friday	Earliest date on which Summer Studies courses begin.
4 Monday	May-August courses begin.
6 Wednesday	Senate meets.
11 Monday	May and May-June first term courses begin.
15 Friday	Last day of final practicum for Professional Years (regular programs) in Faculty of Education.
18 Monday	Victoria Day.*
20 Wednesday	Special Senate meeting (tentative).
28 Thursday	Spring Convocation.
29 Friday	Spring Convocation.
30 Saturday	Spring Convocation.

June 1992

	Senate meets (date to be announced).
3 Wednesday	May courses end.
4 Thursday	June courses begin.
26 Friday	May-June and June courses end.

July 1992

1 Wednesday	Canada Day.*
2 Thursday	Reading Break.
3 Friday	Reading Break.
6 Monday	July and July-August courses begin.
22 Wednesday	Supplemental examinations for Winter Session 1991-92 begin.
28 Tuesday	July courses end.
29 Wednesday	August courses begin.
31 Friday	May-August classes end.

August 1992

3 Monday	British Columbia Day.*
4 Tuesday	May-August examinations begin.
12 Wednesday	May-August examinations end.
21 Friday	July-August and August courses end. End of Summer Studies.

* *Classes are cancelled on all holidays and during reading breaks. Administrative offices and academic departments are closed on holidays. The McPherson Library is closed on all holidays except Remembrance Day, Good Friday and Easter Monday.*

GENERAL INFORMATION

HISTORICAL OUTLINE

The University of Victoria came into being on July 1, 1963, but it had enjoyed a prior tradition as Victoria College of sixty years distinguished teaching at the university level. This sixty years of history may be viewed conveniently in three distinct stages.

Between the years 1903 and 1915, Victoria College was affiliated with McGill University, offering first and second year McGill courses in Arts and Science. Administered locally by the Victoria School Board, the College was an adjunct to Victoria High School and shared its facilities. Both institutions were under the direction of a single Principal: E.B. Paul, 1903-1908; and S.J. Willis, 1908-1915. The opening in 1915 of the University of British Columbia, established by Act of Legislature in 1908, obliged the College to suspend operations in higher education in Victoria.

In 1920, as a result of local demands, Victoria College began the second stage of its development, reborn in affiliation with the University of British Columbia. Though still administered by the Victoria School Board, the College was now completely separated from Victoria High School, moving in 1921 into the magnificent Dunsmuir mansion known as Craigdarroch. Here, under Principals E.B. Paul and P.H. Elliott, Victoria College built a reputation over the next two decades for thorough and scholarly instruction in first and second year Arts and Science.

The final stage, between the years 1945 and 1963, saw the transition from two year college to university, under Principals J.M. Ewing and W.H. Hickman. During this period, the College was governed by the Victoria College Council, representative of the parent University of British Columbia, the Greater Victoria School Board, and the provincial Department of Education. Physical changes were many. In 1946 the College was forced by postwar enrollment to move from Craiarroch to the Lansdowne campus of the Provincial Normal School. The Normal School, itself an institution with a long and honourable history, joined Victoria College in 1956 as its Faculty of Education. Late in this transitional period (through the cooperation of the Department of National Defence and the Hudson's Bay Company) the 284 (now 385) acre campus at Gordon Head was acquired. Academic expansion was rapid after 1956, until in 1961 the College, still in affiliation with U.B.C. awarded its first bachelor's degrees.

In granting autonomy to the University of Victoria, the *Universities Act* of 1963 vested administrative authority in a Chancellor elected by the Convocation of the University, a Board of Governors, and a President appointed by the Board; academic authority was given to a Senate which was representative both of the Faculties and of the Convocation.

The historical traditions of the University are reflected in the Arms of the University, its academic regalia and its house flag. The B.A. hood is of solid red, a colour that recalls the early affiliation with McGill. The B.Sc. hood, of gold, and the B.Ed. hood, of blue, show the colours of the University of British Columbia. Blue and gold have been retained as the official colours of the University of Victoria. The motto at the top of the Arms of the University, in Hebrew characters, is 'Let there be Light'; the motto at the bottom, in Latin, is 'A Multitude of the Wise is the Health of the World.'

UNIVERSITY REGALIA

Visitor

Gown — royal blue wool broadcloth, trimmed with gold silk taffeta.

Headdress — black velvet mortarboard, trimmed with gold braid.

Chancellor

Gown — purple corded silk, trimmed with purple velvet and gold braid.

Headdress — black velvet mortarboard, trimmed with gold braid.

President

Gown — royal blue corded silk, trimmed with blue velvet and gold braid.

Headdress — black velvet mortarboard, trimmed with gold braid.

Board of Governors

Gown — Cambridge (Doctor of Music) pattern, grey material, with gold and blue ribbon trim.

Headdress — black cloth mortarboard, with black silk tassel.

Honorary Doctorate of Laws (Hon. LL.D.)

Gown — Cambridge (Doctor of Music) pattern, scarlet wool broadcloth, trimmed with blue-purple silk taffeta.

Hood — Aberdeen pattern, outside shell of scarlet wool broadcloth, lined with blue-purple silk taffeta.

Headdress — Tudor style in black velvet with red cord trim.

Honorary Doctorate

Gown — Cambridge (Doctor of Music) pattern, scarlet wool, front facings and sleeve lining of black silk taffeta.

Hood — Aberdeen pattern, outside shell of black wool, lined with silk taffeta in a solid colour with a one inch band of black velvet on the outside edge.

Hon.D. Litt. — white	Hon.D.Mus. — pink
Hon.D.Ed. — blue	Hon.D.Sc. — gold
Hon. D.Eng. — orange	Hon. D.S.N. — apricot
Hon.D.F.A. — green	

Headdress — Tudor style in black velvet with red cord trim.

Bachelors

Gown — traditional (Canadian) Bachelor's style, in black.

Hood — Aberdeen pattern (B.A., B.Sc., and B.Ed., without neckband and finished with two cord rosettes; all others with mitred neckpiece), outside shell of silk taffeta in a solid colour, lined with identical material. Faculty colours are as follows:

B.A. — scarlet	B.Mus. — pink
B.Sc. — gold	B.S.N. — apricot
B.Ed. — blue	B.S.W. — citron
B.Eng. — orange	LL.B. — blue-purple
B.F.A. — green	

Headdress — standard black cloth mortarboard with black silk tassel.

Masters

Gown — traditional (Canadian) Master's style in black.

Hood — similar in design and colour to the respective Bachelor's hoods, but with mitred neckpiece and a narrow band of black velvet one inch from edge of hood on the outside only. Others are:

M.A.Sc. — orange	M.P.A. — russet

Headdress — standard black cloth mortarboard with black silk tassel.

Doctors

Gown — Cambridge style, black silk, front facings and sleeve linings of scarlet silk.

Hood — Oxford Doctor's Burgon shape, shell of scarlet silk, lined with blue silk, border of gold silk.

Headdress — black velvet mortarboard with red tassel fastened on left side.

NOTE: On ceremonial occasions, participants without degrees wear the standard black undergraduate cap and gown as described above for bachelors.

GLOSSARY OF UNIVERSITY TERMS

New students will find the following definitions helpful in becoming familiar with terms used in this Calendar.

Aegrotat — Literally, "he is ill"; transcript notation accompanying a letter grade assigned where illness or similar affliction affected the student's performance.

Auditor — A student who pays a fee to sit in on a course without the right to participate in any way. Auditors are not entitled to credit. (See page 14.)

Award — See list of definitions under Scholarships and Awards.

Chair — In the Academic Regulations in the section under General Information, this means the Chair of a Department, the Director of a School, Centre or Program, and in the case of Law students, the Dean of the Faculty.

Convocation — Academic assembly; body composed primarily of graduates of the University.

Corequisite — A specific course or requirement which must be undertaken at the same time as a prescribed course.

Course — A particular part of a subject studied, such as English 121.

Credit Unit — Positive numerical value used in assigning the value of a course, such as Economics 100 (3 units).

Department — In academic regulations, this covers any academic administrative unit, including a department, school, centre, program or Faculty as the context requires.

Discipline — A subject of study within a department.

Full Time Student — An undergraduate student undertaking 12 or more units of study in the Winter Session.*

Grade Point — Positive numerical value given to an alphabetical letter grade used in assessment of academic performance.

Graduate Student — A student who has received a Bachelor's degree or equivalent and who is enrolled in a program leading to a Master's or Doctoral degree.

Letter Grade — Any of the letters used in the grading system shown under Academic Regulations.

Lower Level Courses — Courses numbered from 100 to 299.

Major — The subject or area of specialization or emphasis in a degree program.

Part Time Student — An undergraduate student undertaking fewer than 12 units of study in the Winter Session.*

Plagiarism — A form of cheating by means of the unacknowledged, literal reproduction of ideas and material of other persons in the guise of new and original work. See Statement on Cheating, page 16.

Prerequisite — A preliminary requirement which must be met before registration in a prescribed course.

Probation — A period of trial for a student whose registration is subject to academic conditions.

Program — The courses of study organized to fulfill an academic objective, such as a B.Sc. program.

Registration — The process of formally enrolling in courses.

Regular Student — A student who is registered as a candidate for a University of Victoria degree, or in credit courses leading to a University of Victoria Diploma.

Section — The division of a course, e.g. Section Y01 of French 100.

Session — Designated period of time during which courses of study are offered, i.e., Winter Session, Summer Session.

Special Student — A student who is admitted to credit courses but who is not a candidate for a University of Victoria degree or diploma.

Student — A person who is enrolled in at least one credit course at this University.

Term — A period of time in the academic year: a term in the Winter Session consists of 13 weeks, in the Summer Session, approximately 3 weeks (F = First Term; S = Second Term).

Transcript — A copy of a student's permanent academic record.

Transfer Credit — Credit for courses at the postsecondary level.

Undergraduate Student — A student registered in an undergraduate faculty or in a program leading to a Bachelor's degree or an undergraduate diploma.

Unclassified — Refers to the year in which certain students are registered.

Upper Level Courses — Courses numbered from 300 to 499.

Year — A minimum of 15 units of courses; the level within a program of study or the level of a course, e.g., First Year student, First Year course (Physics 110).

* See Faculty of Graduate Studies for graduate students.

CALENDAR CHANGES

The official academic year begins on July 1. Changes in Calendar regulations normally take effect with the beginning of the Winter Session in September each year. Nevertheless the University reserves the right to revise or cancel at any time any rule or regulation published in the Calendar or its supplements.

ACADEMIC SESSIONS

The Winter Session is divided into two terms — the first, September to December; the second, January to April. The period May through August is administered under Summer Studies. The Calendar Supplement for Summer Studies is published separately. A list of credit courses offered in the late afternoon and evening is also published separately. (See inside front cover.)

PROGRAMS OFFERED

The University offers the following degrees through the Faculty of Arts and Science, the Faculty of Education, the Faculty of Engineering, the Faculty of Fine Arts, the Faculty of Graduate Studies, the Faculty of Human and Social Development, the Faculty of Law: Bachelor of Arts; Bachelor of Commerce (new); Bachelor of Education (Elementary Curriculum) and Bachelor of Education (Secondary Curriculum); Bachelor of Engineering; Bachelor of Fine Arts; Bachelor of Laws; Bachelor of Music; Bachelor of Science; Bachelor of Science in Nursing; Bachelor of Social Work; Master of Arts; Master of Applied Science; Master of Education; Master of Engineering; Master of Fine Arts; Master of Music; Master of Public Administration; Master of Science; Doctor of Philosophy. Also offered are degree programs in Education for graduates seeking teacher certification, a Diploma Program in Public Sector Management for persons in interior centres in the Province, and Diploma Programs in Applied Linguistics, Cultural Conservation, Fine Arts, Humanities, and School Librarianship; all of which are credit programs. A program leading to a Certificate in Kodaly Methodology is offered by the Faculty of Education.

Cooperative Education Program:

The University offers students in certain programs the opportunity to undertake studies involving work in industry, government or some professions. See page 32.

ACADEMIC ADVICE

In choosing undergraduate degree programs, students are strongly urged to consult the Calendar prescriptions for the degree program desired. Advice may be obtained from the advising centres and departments of the faculties.

Students who register in the Faculty of Arts and Science or the Faculty of Fine Arts and who intend to undertake studies at a later date in the Faculty of Education should plan their programs with this in mind. Advice may be obtained from the Advising Centre of the Faculty of Education. Similarly, academic advice about the professional programs in the Faculty of Human and Social Development is available from faculty members of the appropriate school, on an appointment basis.

PREPROFESSIONAL STUDIES

Students who intend to complete a year or two of studies and then transfer to another university are urged to design their program so that they will meet the requirements of the other institution they plan to attend. In this connection, by proper selection of First Year courses in Arts and Science, students may equip themselves to enter the first year of Forestry, and the second year of Agriculture, Physical Education, Pharmacy, at certain other universities. Courses preparatory to Medicine, Dentistry, Architecture, etc., may be taken at the University for studies elsewhere. See page 30, Preprofessional Education. Advice may be obtained from the Advising Centre of the Faculty of Arts and Science.

CAREER INFORMATION AND VOCATIONAL COUNSELLING

The University recognizes the importance of career planning and decision making, and all students are urged to investigate and explore career opportunities early in their University stay, especially those relating to their academic studies. The Counselling Services, the Canada Employment Centre on Campus, and the Alumni Association are available to students with career questions and concerns. A detailed description of these services appears on pages 25, 27 and 29, respectively.

ENTRANCE AWARDS AND FINANCIAL AID

The University offers a number of scholarships to students entering from senior secondary schools in British Columbia. Complete details about these awards and other entrance awards offered by agencies outside the University are found at the back of the Calendar. Application forms may be obtained from the office of the Administrative Registrar.

Financial aid schemes open to all students attending the University are described under Financial Aid at the back of the Calendar. Information in regard to financial aid may be obtained from the Student Financial Aid Office, whose personnel will be pleased to give whatever advice and assistance they can.

DISABLED STUDENTS

The University aims to provide adequate services and facilities for its disabled students. Students with a wide range of disabilities have successfully completed programs at the University. Victoria usually has little snow or ice in the wintertime, the residences can accommodate students using wheelchairs, the buildings on campus are largely accessible, and there is a continuing effort to improve accessibility to the facilities of the University.

Services to disabled students are provided by a number of students, staff and faculty. These services are outlined in a pamphlet available from Admission Services. Although some services and facilities may be limited, every effort will be made to assist individual students.

Disabled students who have questions or who feel they may need special assistance should contact the Associate Director of Student and Ancillary Services.

LIMITATION OF ENROLLMENT

The University reserves the right to limit enrollment, and to limit the registration in, or to cancel or revise, any of the courses listed. The curricula may also be changed, as deemed advisable by the Senate of the University.

Except in special circumstances, no student under the age of sixteen may be admitted to the First Year, or under the age of seventeen to the Second Year.

LIMIT OF RESPONSIBILITY

The University of Victoria accepts no responsibility for the interruption or continuance of any class or course of instruction as a result of an act of God, fire, riot, strike, or any cause beyond the control of the University of Victoria.

CATEGORIES OF STUDENTS

Each student who has been authorized to register in a faculty other than Graduate Studies is designated as one of the following:

1. Regular student — A student admitted to credit courses as a candidate for a degree or diploma.
2. Special student — A student admitted to credit courses but not a candidate for a degree or diploma.

For categories of graduate students, see Faculty of Graduate Studies.

CLASSIFICATION OF UNDERGRADUATES BY YEAR

Classification of Regular Students by Year is normally based on the number of units completed, as follows:

Below 12 units	First Year
12 to 26½ units	Second Year
27 to 41½ units	Third Year
42 units or above	Fourth Year (4 year programs)
42 to 56½ units	Fourth Year (B.Ed only)
57 units or above	Fifth Year (B.Ed only)

Special Students are unclassified as to Year.

COURSE VALUES AND HOURS

Each course which is offered for credit has a unit value. A full course normally has a value of 3 units. In the course outline given in each of the faculties, the number of units assigned to each course is given in brackets immediately following the course number. Thus ANTH 305(1½) indicates that Anthropology 305 has a value of 1½ units.

The hours assigned for lectures or seminars, laboratory or practical sessions and tutorials in a course are indicated in the following examples:

(3-0) — 3 hours lecture/seminar per week.
(2-1) — 2 hours lecture/seminar and 1 hour laboratory or practical session per week
(3-0-1) — 3 hours lecture/seminar and 1 hour tutorial per week

Codes found in course listings show the duration of courses:

F = September-December
S = January-April
Y = September-April
K = May-August 1992*

*See Summer Studies calendar for codes applicable to shorter courses offered in the period May through August.

LECTURE AND LABORATORY SCHEDULE

The schedule of classes for the Winter Session is published in early July.

ADMISSION

Each applicant who is applying for admission to the university is required to furnish the information necessary for the University record, and to sign the following declaration:

I hereby accept and submit myself to the statutes, rules, regulations, and ordinances of the University of Victoria as authorized by the Senate and the Board of Governors, and of the Faculty in which in due course I shall be registered, and to any amendments thereto which may be made while I am a student of the University, and I promise to observe the same.

DEGREE PROGRAM PREREQUISITES†

For the convenience of applicants who have graduated from British Columbia senior secondary schools, the secondary school course requirements specified for programs offered with the faculties and departments or schools of the University are assembled in this chart.

R - Required **O - Optional but Recommended**

DEGREE PROGRAMS (by Faculty and Department or School)	Gen. Adm. Req only*	Math 12	Biology 11	Biology 12	Chemistry 11	Chemistry 12	Comp St. 11	CSc 12	Geog 12	Geom 12	Hist 12	Lit 12	Physics 11	Physics 12	Prob & Stats 12	Science 12
ARTS AND SCIENCE (see Notes 2 and 5)																
Anthropology		O	O				O									
Astronomy (see Notes 1 & 2)		R											O	O		
Biochemistry & Microbiology (see Note 1)		R	O	O	R	O							R	O	O	
Biology (see Notes 1 & 2)		R	O	O	R	O							R	O		
Chemistry (see Notes 1 & 2)		R			R	O							R	O		
Classics (incl. Greek & Latin) (see Note 2)	G															
Computer Science (see Note 2)		R					O	O								
Economics (see Note 1)		R														
English (see Note 2)												O				
French Language & Literature (see Note 2)	G															
Geography (see Note 2)		O								O						
Germanic Studies (see Note 2)	G															
Hispanic & Italian Studies (see Note 2)	G															
History (see Note 2)											O	O				
Linguistics (B.A.) (see Note 2)		O					O	O								
Linguistics (B.Sc.) (see Note 2)		R	O				O	O					O			
Mathematics & Statistics (see Note 2)		R														
Pacific & Asian Studies (see Note 2)	G															
Philosophy (see Note 2)	G															
Physics (see Notes 1 & 2)		R			O	O							R	O		
Political Science		O									O	O			O	
Psychology (see Note 3)		O								O					O	O
Slavonic Studies (see Note 2)	G															
Sociology		O					O			O					O	O
EDUCATION (see Note 4)																
Education (Elem)			O						O			O	O			
Education (Sec)																
Physical Education			O		O							O	O			
Human Performance Arts			O		O							O	O			
Human Performance (see Note 2) Science		R	O	O	R	O						O	O			
Leisure Studies (see Note 2)			O		O							O	O			
ENGINEERING																
Computer Science (see Note 2)		R					O	O								
Electrical & Computer Engineering (see Notes 2 & 6)		R			R	O							R	R		
Mechanical Engineering (see Notes 2 & 6)		R			R	O							R	R		
FINE ARTS (see Notes 2 & 5)																
Creative Writing (see Notes 2 & 9)	G															
History in Art (see Note 2)	G															
Music (see Note 7)	G															
Theatre (see Note 8)	G															
Visual Arts	G															
HUMAN & SOCIAL DEVELOPMENT																
Child & Youth Care (see Note 10)																
Health Information Science (see Notes 2 & 13)		R	O	O			O	O							O	
Nursing (see Note 11) 2 year program																
Social Work (see Note 12)																

† In addition to the general admission requirements.
* Science = Biology, Chemistry, Computer Studies II (except B.Ed. Elem.), Earth Science, Geology, Physics.

Note 1: Exceptions may be made by the Department. Although special courses or sections of first year Chemistry and Physics 102 are available if prerequisites are lacking, students planning to specialize in Astronomy, Biochemistry, Biology, Chemistry, Microbiology or Physics are strongly urged to complete Mathematics 12, both Chemistry 11 and 12, at least Physics 11 and preferably Physics 12.

Note 2: Cooperative Education Programs in Biology, Chemistry, Computer Science, Creative Writing, Electrical & Computer Engineering and Mechanical Engineering, Geography, Health Information Science, Human Performance (B. Sc.), Leisure Studies, Math (incl. Statistics) and Physics (incl. Astronomy) and the Arts Cooperative Programs in: Classics, English, French-Language & Literature, Germanic Studies, Hispanic & Italian Studies, History, Linguistics, Pacific & Asian Studies, Philosophy, Slavonic Studies, and History in Art are available and information may be obtained by contacting the Department concerned.

Note 3: Recommended — Mathematics 12 or Geometry 12 or Probability and Statistics 12.

Note 4: Students planning a program in the Faculty of Education take their first year in the Faculty of Arts and Science. They are referred to the Education Advising Centre when considering their selection of courses. In the second year students transfer to the Faculty of Education.

Note 5: UVic now offers an Arts Coop Program in many areas. Contact the Arts Coop Coordinato for details: 721-8841.

Note 6: Must normally obtain grade of B or better in Mathematics 12, and Physics 12.

Note 7: Music requires an audition and interview for admission to its programs of study. Contact: Administrative Officer, School of Music.

Note 8: Interview and/or audition required.

Note 9: Advanced Standing (Second Year and Above) — portfolio required. Contact Chairman department.

Note 10: Requires 12 units of College or University study, or equivalent, including appropriate courses as outlined in the calendar.

Note 11: RN Certification required prior to application.

Note 12: Requires two years of College or University Study, including appropriate courses a outlined in the calendar.

Note 13: Requires one year of College or University study, including appropriate courses as outlined in the calendar.

Inquiries relating to admission to the Faculty of Graduate Studies should be addressed to the Graduate Admissions and Records Office, Main Floor, University Centre; for the Faculty of Law, inquiries should be addressed to Law Admissions Officer, Faculty of Law, Begbie Building.

All inquiries relating to admission to faculties other than Graduate Studies and Law should be addressed to Admission Services, Main Floor, University Centre. Details follow:

1.00 ADMISSION REQUIREMENTS

The following regulations notwithstanding, the University reserves the right to reject applicants for admission on the basis of their overall academic records, even if they technically meet entrance requirements.

Normally, applicants must have fulfilled the requirements listed below by June, and all required documents must have arrived in Admission Services by August 1 of the year in which admission is being sought. Files becoming complete after this date will not normally be processed.

Additional requirements for admission to specific programs offered by the faculties of the University are shown in the chart on the next page. Individual departments may have set higher standards for entry than the minimum standards described below; consult Faculty and departmental regulations.

The University reserves the right at any time to set enrollment limits in any Faculty or program, and to establish admission criteria above and beyond the minimum requirements set down in the Calendar.

1.10 *Entry to Year One*

1.11 *British Columbia and Yukon Secondary School Graduates*

The requirement is graduation from senior secondary school as prescribed by the Ministry of Education of the Province of British Columbia, including:

(a) successful completion of Mathematics 11, English 11, Social Studies 11, a science 11 and a language 11 (see below for approved science and language subjects) and

(b) a minimum overall C+ (2.5 on a four point scale) average in English 12 and three additional academic 12 level subjects selected from the Curriculum Reference Chart as approved by the Ministry of Education. Acceptable subjects are Biology 12, Chemistry 12, Computer Science 12, French 12, Geography 12, Geometry 12, German 12, History 12, Japanese 12, Latin 12, Literature 12, Mandarin Chinese 12, Mathematics 12, Physics 12, Probability and Statistics 12, Spanish 12, Survey Mathematics 12, Western Civilization 12. Grade 12 Provincial Examinations must be written in each subject presented for admission if the examination was available in the year in which the subject was taken. Some locally developed courses have also been approved by the University for admission purposes.

Acceptable Science 11 subjects are Biology 11, Chemistry 11, Computer Science 11, Earth Science 11, and Physics 11.

Acceptable language 11 subjects are French 11, German 11, Japanese 11, Latin 11, Mandarin Chinese 11, Spanish 11. A beginners language 11 will not be accepted in place of a language 11 course. Applicants who wish to substitute a locally developed (LD) language subject for the language 11 requirement must arrange through the Principal to have an outline submitted for evaluation by Admission Services.

Applicants whose first language is not English may apply for an exemption from the language 11 requirement. Such applicants will be required to demonstrate written and verbal fluency in their native language. Applications for language testing may be obtained from Admission Services.

Faculty of Fine Arts

The requirement is secondary school graduation as above including: Successful completion of English 11, Social Studies 11, and THREE of the following: an approved fine arts 11 course, a language 11 course, a science 11 course, Mathematics 11; and

A minimum overall C+ average calculated on English 12 and three academic courses selected as above or English 12 plus two academic courses selected as above and one approved fine arts 12 elective.

1.12 *Special Admission of Distinguished Students Currently Registered in Senior Secondary Schools in British Columbia*

Distinguished senior secondary school students may apply for conditional admission to the University prior to graduation from their secondary school provided that the following criteria are met:

The student must be recommended by the school Principal.

The student must be maintaining a B average in all subjects and an A average in the discipline to be undertaken at the University. If the student elects a discipline not taught in the school attended, the Principal of the school must make a special recommendation, in writing, stating the student's particular aptitudes.

The University department concerned must support the student's application.

The student must be completing a total of at least 12 courses in Grade XI and XII leading to graduation and should normally be taking as many courses as are required for access to scholarships offered by the Government of the Province.

The University will accept applicants who have met the above criteria and will register them as "special students" in no more than 6 units of work in any given academic session.

Credit towards a degree will be granted by the University for courses successfully completed when the student is authorized to register in a degree program.

1.13 *Graduates of Secondary Schools in Alberta, Saskatchewan, Manitoba, New Brunswick, Prince Edward Island, Nova Scotia, Newfoundland, The Northwest Territories*

Applicants from these provinces require secondary school graduation including:

Successful completion of the equivalent of Mathematics 11 (academic), English 11, social science 11 (such as History, Geography, etc.), a science 11 and a second language 11.

A minimum overall average equivalent to the British Columbia C+ on the equivalent of English 12 and three additional Grade 12 level academic subjects.

1.14 *Graduates of Secondary Schools in Ontario*

Applicants require either:

Grade 13 graduation with a minimum 65% overall average (transfer credit will not be awarded for grade 13 courses) or

completion of Grade 12 including successful completion of the equivalent of Mathematics 11 (academic), English 11, social science 11 (such as History, Geography, etc.), a science 11 and second language 11 and a minimum 75% overall average on the equivalent of English 12 and three academic Grade 12 level subjects, or

successful completion of the Ontario Secondary School Diploma (OSSD) including a minimum of six Ontario Academic Courses (OACs), of which one must be English, with a minimum 65% overall average on the six OACs. Transfer credit will not be awarded for the OACs.

1.15 *C.E.G.E.P — Quebec*

Applicants who have completed only two semesters at a C.E.G.E.P. with a minimum overall average of 70% will be considered for admission to Year One.

1.16 *Senior Matriculants from Outside Canada, United States*

Applicants require high school graduation, with studies to include at the senior level (equivalent to British Columbia Grades 11 and 12): 4 semesters of english, 2 semesters of a social science (such as Geography, History, etc.), 2 semesters of mathematics (academic), 2 semesters of a science and a second language, and 6 semesters of Grade 12 academic subjects with a grade point average equivalent to a British Columbia C+ on all academic subjects taken at the Grade 12 level.

Other Countries

Applicants should contact Admission Services for a brochure entitled *Foreign Students Admissions Guide* which contains the admission requirements for all countries from which the University currently receives applications. A preliminary application form will also be forwarded; the University will evaluate the applicant's stated credentials and advise of eligibility for admission. There is a $10 (Cdn.) fee for this service.

1.17 *Mature Students*

The University of Victoria is most willing to assist persons who are at least 21 years of age (prior to the beginning of the session applied for) to complete their higher education even though they may not possess formal university entrance requirements. Under the direction of

the Senate Committee on Admission and Reregistration, Admission Services deals with applications from mature persons on an individual basis. Applicants who have taken a full year or equivalent of university level courses are not eligible to apply under this regulation.

1.18 *Provincial Adult Basic Education Diploma*

The Provincial Adult Basic Education Diploma is recognized for entry to the first year of an undergraduate program. A minimum C+ average is required based on Algebra, English, a laboratory science, and a second language (all at the advanced level), and English plus three academic subjects chosen from Biology, Chemistry, Physics, Earth Science, Geography, Literature, History, Mathematics (academic), Computer Science, Calculus, and Languages (all at the provincial level).

In addition, holders of the P.A.B.E.D. must be 19 years of age or over prior to the beginning of the session applied for.

University level courses used to obtain the Diploma will not be recognized for transfer credit at the University of Victoria.

1.20 *Admission With Advanced Standing*

Note that applicants who have failed their last year, or who have an overall weak academic record may not be permitted to transfer to the University of Victoria, even if eligible for admission under 1.10.

1.21 *Colleges and Universities*

Applicants require successful completion of a minimum of 12 units of transferable courses with an overall average equivalent to C (2.00) at the University of Victoria (2.00 on a four point scale), calculated on the most recent session; and, if the number of units taken in that session is less than 12, on a cumulative total of the most recent 12 units. Only University level courses will be used in the calculation; repeated and failed courses will be included. Applicants with less than 12 transferable units will be evaluated for admission under Section 1.10. See also Section 1.20.

Early admission may be granted to applicants who have successfully completed a single term of transferable courses, provided an average of B (3.00) is maintained on at least six units of transfer work. Early admission is provisional, and applicants must provide a final transcript which meets the requirement for the C average on a minimum of 12 transferable units.

1.22 *Institutes of Technology*

Applicants require completion of a two year Diploma with a minimum 70% average. Transfer credit will normally be limited to 15 units at the first year level but, at the discretion of the department concerned, more may be granted. Upper level credit may be granted upon detailed comparison of examinations and syllabi and text made by the department concerned.

1.23 *Colleges of Applied Arts & Technology (CAAT)*

Applicants require completion of a three year Diploma with a minimum overall average of 70%. No more than 15 units of transfer credit at first or second year level will be granted.

1.24 *Quebec C.E.G.E.P.*

Applicants with le diplome d'études collègiales (D.E.C.) on completion of the two year academic course of studies with a minimum overall average of 70%, at a collège d'enseignement générale et professionnel (C.E.G.E.P.) may normally be granted up to 15 units of credit at first or second year level.

1.25 *International Baccalaureate*

Applicants who have successfully completed the International Baccalaureate Diploma requirements, including three subjects at the Higher Level and two subjects at the Subsidiary Level, are eligible to receive 15 units of transfer credit at first or second year level.

1.26 *Great Britain —British General Certificate of Education (G.C.E.):*

Applicants require standing in at least 5 subjects including English, Mathematics, a second language, a laboratory science and an academic elective, of which 3 must be at the Advanced (A) Level (or 2 at the Advanced A Level plus satisfactory completion of 2 AS Levels). A minimum overall average of C is required on the best three academic Advanced (A) Level subjects. A grade of E is not acceptable. Applicants presenting three (3) academic "A" Level subjects may be eligible to receive up to 15 units of transfer credit at first or second year level.

— Cambridge School Certificate:

As for the G.C.E. above, with stated standing in Principal Level courses.

1.27 *Hong Kong —University of Hong Kong Matriculation Certificate*

Applicants require standing equivalent to G.C.E. Grades of D and E are not acceptable.

1.30 *Advanced Standing and Transfer Credit*

An applicant who has passed an Advanced Placement examination administered by the College Entrance Examination Board with a grade of 4 or 5 in the subjects listed below, will receive transfer credit for the corresponding courses shown.

Art (History), 3 units of H A 120;
Biology, 3 units of BIOL 150 A/B;
Calculus AB, 1.5 units MATH 100;
Chemistry, 1.5 units each CHEM 101, 102;
Comp. Sci. A or AB, 1.5 units of C.Sc. 110 (except for B.Eng. students)
B.Eng. students: 1.5 units of Comp. Sci. 100 level
Economics (both micro and macro), 1.5 units of ECON 100;
English (language and composition), 3 units of ENGL 115/116;
English (literature and composition), 3 units of ENGL 121/122;
French Language, 3 units of FREN 180;
German, 3 units of GERM 100;
History (American), 3 units of HIST 210;
History (European), 3 units of HIST 240;
Latin, 3 units of LATI 100;
Music, 1 unit each for MUS 101A/B, MUS 170 (3 units total);
Physics B, 3 units of PHYS 102;
Physics C (mechanics), 1.5 units of PHYS 120;
Physics C (electronics & magnetism), 1.5 units of PHYS 216;
Spanish, 3 units SPAN 100

1.31 *Advanced Placement Program*

An applicant who has passed an Advanced Placement examination administered by the College Entrance Examination Board with a grade of 3 in the subjects shown below will be granted advanced placement only. Applicants should consult with the department concerned for course advice.

Art (History)
Art (Studio) no transfer credit given
Biology
Computer Science
Economics
English
French
German
Latin
Mathematics
Music
Physics
Spanish

1.32 *International Baccalaureate Courses Taken on an Individual Basis*

Each subject completed satisfactorily at the Higher Level will receive 3 units of credit, to a mamum of 9 units.

1.33 *B.C. Grade 13 Courses*

Credit is granted, on an individual course basis, for courses satisfactorily completed on the curriculum of the former B.C. Grade 13 program, provided that the applicant is eligible for admission under the provisions of 1.10 or 1.20.

1.34 *Limitations on Transfer Credit*

Those persons planning to undertake preliminary studies at another institution should verify in advance that the courses which they propose to take elsewhere may be acceptable for transfer credit in their subsequent program at the University of Victoria.

Transfer credit granted on admission is subject to the same regulations as credit earned at the University (See Credit, page 15).

Transfer credit granted in a degree program is limited and may not normally be applied to the final 30 units of the program. Exceptions to this regulation require the approval of the Dean of the faculty concerned.

If a student's performance warrants a review of transfer credit granted on admission, the University reserves the right to require such a student to make up any deficiencies (without additional credit) before proceeding to studies at a higher level. These decisions would normally be taken at the department level.

The University of Victoria Transfer Guide, available from Admission Services, lists those courses at B.C. Colleges that are acceptable for transfer credit at the University.

Courses completed in meeting the requirements of a career or technical program at a college may be evaluated for transfer credit on an individual basis. Transfer credit for such courses is normally granted at first or second year level and is limited to a maximum of 15 units.

1.40 *Admission to a Second Undergraduate Degree*

See page 20 for the requirements for admission to a second bachelor's degree at the University of Victoria.

1.50 *Admission to Nondegree Study (Credit Courses)*

Applicants qualifying for admission to the University under 1.10 and 1.20 are eligible for entry to nondegree study.

Applicants planning to complete their degree elsewhere, who wish to take courses at the University of Victoria for credit at their home university must have a Letter of Permission, in lieu of an official transcript, sent directly by the issuing institution to Admission Services. The letter must include the session for which permission is given, and where possible, the specific courses to be taken.

1.60 *First Admission to Audit Courses*

Refer to page 14 for instructions on how to audit courses.

2.00 APPLICANTS WHOSE FIRST LANGUAGE IS NOT ENGLISH

The University requires that applicants for admission whose first language is not English, and who have not resided in Canada or another English speaking country for the five years immediately prior to the beginning of the session for which application is made, must take the test of English as a Foreign Language (TOEFL) and submit scores by June 30. A score of not less than 575 on the Test of English as a Foreign Language is required for undergraduate admission to the University.

Applicants whose first language is not English but who have resided in Canada or other English speaking countries for the five years immediately prior to the session for which application is made are not required to take the Test of English as a Foreign Language.

Applicants must designate the University of Victoria as a receiving institution for the test results. Applicant copies are not acceptable.

Information concerning the Test of English as a Foreign Language, and the times and places at which it is administered, may be obtained by writing to Counselling Services, University Centre, or to the Education Testing Service, Princeton, N.J. 08540, U.S.A. Applications are available from the University's Counselling Services.

3.00 UNIVERSITY ENGLISH REQUIREMENT

All applicants who are admitted to the University must take the University of Victoria English Placement Test, unless they have satisfied one of the conditions listed on page 13 under English Requirement for Undergraduates.

4.00 APPLICATION FOR ADMISSION TO UNDERGRADUATE FACULTIES (EXCEPT LAW)

4.10 *Application Form*

Persons seeking admission to credit courses for the first time must obtain an Application for Admission from Admission Services. This form must be returned, fully completed, to Admission Services by the date specified for the faculty or program applied for (see inside front cover of this calendar). Normally, no applications for admission will be accepted after June 15 for September entry.

Applicants are reminded that all questions on the application form must be answered. In particular, applicants applying for financial aid must be able to give their Social Insurance Number; the federal government requires that applicants for Canada Student Loans have a Social Insurance Number. Application for a number may be made through the Canada Employment and Immigration Commission.

4.20 *Application for Reregistration*

Persons applying for admission to Summer Studies who plan to attend the subsequent Winter Session must submit an Application for Reregistration to Records Services (see page 12) by the deadlines shown on the inside front cover of the calendar.

4.30 *Required Documentation for First Admission*

Applicants submitting falsified documentation or failing to declare attendance elsewhere shall have their applications cancelled — no further applications will be considered; if they are registered in courses, appropriate disciplinary action shall be recommended to the President by the Senate Committee on Admission and Reregistration.

Transcripts in languages other than English or French must be submitted together with notarized translations into English or French.

An application fee of $15 (Canadian) is required from all applicants applying to the University of Victoria. This fee, which is nonrefundable and not applicable to tuition fees, must accompany the application form. Applications submitted without this fee will be returned.

An evaluation fee (specified on the application form) must accompany the application for every applicant whose records originate, in whole or in part, outside the Province of British Columbia. This fee is not required of visiting students applying on the basis of a letter of permission. It is not refundable, nor can it be applied to tuition.

Candidates applying for degree programs presenting post secondary transcripts from academic institutions outside Canada are required to supply a calendar, catalogue, or syllabus showing a full description of each course successfully completed and the duration of those courses.

4.31 *1992 B.C. Secondary School Graduates*

Applicants graduating from B.C. Secondary Schools in 1992 should apply by February 28 for early admission, and designate the University of Victoria as a receiving institution for interim grades from the Data Systems Administration Branch of the Ministry of Education. The Branch will send interim grades to the University in April, and final grades in August. If an applicant has transfer standing in any grade 11 or 12 course, two official transcripts must be sent directly to Admission Services from the institution at which the courses were taken.

4.32 *1992 Secondary School Graduates within Canada*

Applicants graduating from other Canadian provinces in 1992 should apply by February 28 for early admission, by having their secondary school complete an Out-of-Province Early Submission of Results form, and sending it directly to Admission Services. two final official transcripts showing all courses taken and confirming graduation should be sent directly from the secondary school to Admission Services as soon as results are available.

4.33 *All Other Secondary School Graduates*

Applicants applying to the University on the basis of secondary school graduation must have two official copies of their transcripts showing all courses taken and confirming graduation sent directly from the secondary school or issuing institution to Admission Services as soon as results are available.

4.34 *Mature Applicants*

Candidates applying for admission under the Mature Student Regulation should submit: two official transcripts of all academic work taken sent directly to Admission Services from the issuing institution; a resume outlining work experience since leaving school; a letter handwritten by the applicant including relevant personal background and reasons for wanting to attend university; and finally, two references on forms supplied by the University from employers or persons who know the applicant well. References from relatives are not acceptable. An interview with an Admissions Officer may be required after all documentation required has been received.

Applicants under this category must also possess the prerequisites for the program they wish to enter.

4.35 *Applicants with Advanced Standing*

Any applicant who has completed a year or more of post secondary study must have two official transcripts sent directly from the issuing institution to Admission Services. Applicants with less than one year of post secondary study must supply two official copies of their secondary school transcripts in addition to those covering post secondary study.

4.36 *Applicants Holding Recognized Degrees*

An applicant holding a recognized degree applying for nondegree status should have two official transcripts including proof of conferral of the degree sent by the issuing institution directly to Admission Services.

Applicants to an undergraduate degree program should have two

official transcripts of all post secondary work including proof of degree sent directly to Admission Services by the issuing institution.

4.37 *Visiting Students*

Students studying toward a degree at another institution who wish to take credit courses at this University for transfer back to their home institution must submit a letter of permission from their home institution, indicating the session to which the permission applies, and, if possible, the courses to be taken.

4.40 *Additional Faculty or Program Requirements*

Applicants should consult the program requirements for entry in the chart on page 8, since, in certain cases, applicants must submit additional documentation or meet additional requirements e.g. auditions, portfolio, statement of intent, etc.

Teachers whose professional training was not completed within 10 years prior to their application to the Faculty of Education must submit the following for consideration by the Faculty Admissions and Adjudication Committee:

(a) resume of all teaching experience including dates, locations and grade levels, and indicating whether full time, part time, or substitution; and
(b) copies of the most recent Superintendent's and/or Principal's Reports, and
(c) letter(s) from Principal(s) attesting to teaching effectiveness in substitution roles, if applicable, and
(d) copy of Teacher's Card as issued by Ministry of Education.

4.50 *Notification of Adjudication*

All applicants will be informed in writing of their acceptance or rejection as soon as their application can be processed. Due to the large volume received, this can take up to six weeks; applicants to quota programs may wait longer for notification. Applicants should wait for written confirmation before setting out for the University. This is particularly applicable to applicants who live some considerable distance from Victoria.

4.60 *Petition Procedure*

Any applicant whose application for admission is rejected and who is able to prove extenuating circumstances or provide information that was not presented initially may request in writing (there are no personal appearances in front of the Committee) to the Senate Committee on Admission and Reregistration, c/o Director of Admission Services, that the application be reconsidered. Such a request should include any additional information together with any supporting documents from persons familiar with the applicant's abilities and circumstances. Petitions based on medical reasons require a doctor's certificate.

The Senate Committee on Admission and Reregistration will consider all the documentation presented and will make a final decision on the application, subject to review by the Senate Committee on Appeals on the grounds of specific procedural error (see Avenues of Appeal and Redress, page 14).

4.70 *Enrollment Limitations*

The University reserves the right to limit enrollment. In addition, although applicants may be admissible to the University, it may not be possible to grant them entry to the specific program they wish to follow.

REREGISTRATION

All inquiries relating to reregistation in undergraduate faculties should be addressed to the Director of Records Services.

APPLICATION FOR REREGISTRATION

1. Students who have registered at another university or college since last in attendance at the University are required to state the names of all educational institutions of postsecondary level attended and to submit official transcripts of their academic records at the institutions attended, by the due dates shown on the inside front cover of this Calendar. Failure to disclose attendance at another institution will normally lead to disciplinary action by the University, and may include suspension. An evaluation fee of $25 must accompany the application for reregistration (if not previously submitted) for every applicant whose records originate in whole or in part outside the Province of British Columbia. This fee is not required from "visiting students" or from students who obtained a Letter of Permission from the University of Victoria to study elsewhere. The fee is not refundable, nor can it be applied to tuition.
2. Students who were registered in the most recent session at the University may be authorized automatically for reregistration without the submission of an application; some students will be required to complete an application. Students who were not registered in the most recent session must submit an application for reregistration. Consult Records Services for details.
3. A student who has been required to withdraw from the University in the past because of unsatisfactory progress or standing (see Standing, page 19) and who wishes to be considered for reregistration must follow the procedures listed in (1) and (2) above. A student who was required to withdraw following the most recent session who wishes to appeal the withdrawal or a student who has been required to withdraw a second or subsequent time from the University in the past and who wishes to be considered for reregistration, must include with the application a letter, addressed to the Senate Committee on Admission and Reregistration, c/o Records Services, which states why the student believes the application should be accepted. A final decision regarding the students application, subject to review by the Senate Committee on Appeals on the grounds of specific procedural error (see Avenues of Appeal and Redress, page 14) will be made on the documentation presented.
4. If the results of deferred examinations affect the standing of a student, an Authorization to Reregister may not be issued until examination results are available depending upon the student's academic status.

REGISTRATION

Completion of Registration:

Students should recognize that admission and registration are two separate procedures. Admission to the University does not guarantee entry to a particular course or program. Because enrollment in all courses is limited, admitted students may not be able to register in their chosen courses or sections. Moreover, entry to a specific course may also be limited by academic requirements.

Inquiries relating to registration in undergraduate faculties other than Law should be addressed to the Director of Records Services. Inquiries relating to the registration in the Faculty of Graduate Studies should be addressed to the Director of Admissions and Records, Graduate Studies. See Faculty of Law for regulations concerning registration in that Faculty.

In addition to completing the procedures mentioned above under the headings Application for Admission and Application for Reregistration all students in the Winter Session are required to register as announced by the University (see Sessional Calendar, pages 3 and 4). Each new student, by Letter of Admission, and each returning student, by Authorization to Reregister will be informed about Procedures for Telephone Registration.

All Letters of Admission or Authorizations to Reregister that are not used to register in the term and session to which they apply are automatically cancelled. Students who are issued a Letter of Admission or Authorization to Reregister for September may not use this document

for entry in January (see Registration for One Term Only).

Once registration in a course has been processed, the registration may be cancelled if all fees have not been paid by the due date (see page 21).

Further, Departments reserve the right to cancel the registration of any student who is not able to demonstrate that all course prerequisites have been met or who fails to attend a course within the period indicated below:

Winter Session courses: first seven calendar days from commencement of the course
May-August courses: first seven calendar days from commencement of the course
May-June courses: first two class meetings
July-August courses: first two class meetings

(Note: Students should not assume, however, that failure to attend classes will result in automatic cancellation of their registration — see Student Responsibility, below.)

A student who for medical or compassionate reasons is unable to attend a course during the appropriate period mentioned above may apply to the department within that time to confirm registration in that course and the department may confirm the registration.
(See Attendance at Lectures, page 15, and Voluntary Withdrawal, page 19.)

Student Responsibility:

Students are responsible for ensuring that their courses have been chosen in conformity with Calendar regulations. Also, students are responsible for the completeness and accuracy of their registration. They must ensure that there is no discrepancy between the program they are following and that recorded in Records Services and that all changes, including those in address and telephone number are reported promptly to Records Services. Students may not take courses for which they have not registered. Students who register in a course for which they have previously received credit or for which they have received equivalent credit on transfer must report the Duplicate (DUP) registration to Records Services through the completion of a Duplicate Registration form available from Records Services. Such courses will still count in the student's sessional average, however, when determining the student's standing. (See page 19.)

Students who have credit for courses taken more than seven years ago at the University must consult the departments to ensure that courses they may wish to take have not been taken previously under a different number.

A letter mailed to a student's address as currently on record in Records Services will be deemed adequate notification to the student for all matters concerning the University.

Late Registration:

The period for late registration in the Winter Session is the first five days of classes; in the Summer Studies, the first two days of classes.

Students with Unsatisfactory Standing:

No student with unsatisfactory standing will be permitted to register without permission of the faculty concerned.

Registration for Both Terms in Winter Session:

Students planning to undertake studies in both terms of the Winter Session must register in September for all courses they intend to take, including single term courses beginning in January.

Registration for One Term Only:

If suitable single term courses are available, students may:

(a) register during the registration period for September for a program of courses to be taken in the First or Second Term (see inside cover for due dates of applications);
(b) register during the registration period for January for a program of courses to be taken in the Second Term (see inside cover for due dates of applications).

Changes in Registration: (See due dates on pages 3 and 4)

1. Students may add and drop courses during the first ten days of classes in the First Term and during the first ten days of the Second Term upon formal notification of Records Services. (See instructions in Telephone Registration literature.)
2. Students may drop First Term courses until the last day of classes in October and Full Year and Second Term courses until the last day of classes in February. (See instructions in Telephone Registration literature.) Failure to notify Records Services by the specified date will result in the student receiving a failing grade for the course. (See reductions for dropping courses, page 22.)
3. A student who has a grade of E or F in a First Term course may reregister in the course if it is offered in the Second Term, provided that the student will be registered in not more than 9 units in the Second Term. A student who has an E in the First Term course may take a Second Term course which lists the First Term course as a prerequisite only with the permission of the department concerned.
4. Any undergraduate student, who after registration decides to drop all courses and does not intend to register in any other credit course in the session, is withdrawing from the University and must notify Records Services in writing. (See Withdrawal, page 19.)

Concurrent Registration at Another Institution:

Normally a student may not be registered concurrently in courses offered at the University of Victoria and in university level courses offered at another institution. In exceptional circumstances, such registration may be permitted but only with the prior consent of the Dean of the faculty concerned or the Administrative Registrar.

Registration in Graduate Courses by Undergraduates:

Students in their final year of a Bachelor's degree program who have a grade point average of at least 6.00 in the previous year's work may be permitted to register in up to 3 units of graduate courses on the recommendation of the department concerned and with the consent of the Dean of Graduate Studies. Students in the Public Administration Diploma program who have completed at least 9 units of course work, and have a grade point average of at least 6.00, may be permitted to register in up to 4½ units of graduate courses in Public Administration upon the recommendation of the Director and subject to the approval of the Dean of Graduate Studies. Apart from students admitted to the Faculty of Graduate Studies, no students other than those mentioned above may register in graduate courses.

Application for Graduation:

See Graduation, page 20.

English Requirement for Undergraduates:

All students enrolling in the University for the first time must complete at least 1.5 units of University of Victoria first-year English.

1. Students will be exempted from this requirement (provided they are not required by their Faculty and/or program to have credit for English) for any of the following reasons:
   (a) A score of 80% or above on the B.C. Provincial Grade 12 English Examination within the last three years prior to admission;
   (b) A mark above 35 out of 60 on the E.P.T. (English Placement Test) administered by the Department of English;
   (c) A score of 3 or higher (out of 5) on the Advanced Placement Examination in English;
   (d) Three units or more of transfer credit for university level English courses;
   (e) Specific equivalency for English 115 or 215.
2. Students who have not taken the B.C. Provincial Grade 12 English Examination within the last three years, or who have scored lower than 70% on it, must write the E.P.T. to determine whether they must register in English 099 or Linguistics 099 before completing their required 1.5 units of English.
3. Full-time students not exempted from the requirement, must register in 1.5 units of English before the end of their second year; in the event that they fail to complete the requirements before 30 units of credit have been obtained, they must register in an English course in each subsequent session they attend until the requirement is completed. Part-time students are encouraged to complete their English requirement as soon as possible, but are not required to do so until they have accumulated 3 units of credit.
4. Students who are completing a degree on a part-time basis, may satisfy the English requirement through the Open Learning Agency. If they must write the E.P.T., they may do so locally at the time and place arranged in consultation with the Director of First Year English (a fee will be charged for this test).

Students who have satisfied the University English Requirement need take only those English courses which may be required in their degree

program. Students who fail to achieve a satisfactory score on the University of Victoria English Placement Test are directed as follows:

— Those whose first language is English must register in English 099 for the first term and in English 115 for the second term. Students in English 099 may not take any other English course until they have completed 099. Those who fail English 099 in the first term must repeat the course in the second term. If such students fail the course again, they must repeat it in the next winter session term that they attend; should they not do so, or do so and fail, they will normally be denied permission to return to the University in any future session until they have demonstrated the required level of competence in English. Such denials are subject to appeal to the Senate Committee on Admission and Reregistration. To qualify for reregistration, students must register in English 115 in the term following successful completion of 099 and in each subsequent term attended until passed. (Any deviation from this sequence must have approval from the Director of First Year English.) Upon successful completion of English 115 these students will have satisfied the University English Requirement.

— Those whose first language is not English must follow the same procedure as for those whose first language is English, except that such students will be required to take Linguistics 099 instead of English 099. Students who are required to take Linguistics 099 will be admitted to the University only in September when the course begins.

Students who fail Linguistics 099 will be required to repeat the course in the next year. If they pass the course at the second attempt, they will proceed to English 115; if they fail Linguistics 099 at the second attempt, they will be required to withdraw from the University for insufficient command of the language of instruction.

For students who are placed initially in either English 099 or Linguistics 099, successful completion of English 115 is necessary to satisfy the University English Requirement. There must be no interruption in the sequence of courses without the permission of the Director of First Year English. The repetition of Linguistics 099, English 099, or English 115 must also occur in the next term attended.

Exception:

I. Letter of Permission
Those students who are admitted on a Letter of Permission are not obliged to satisfy the University English Requirement.

Students can obtain information about registering for and writing the University of Victoria English Placement Test from Admissions Services or the Department of English.

AUDITING A COURSE

An individual who is either a registered student or a member of the community may be permitted to audit up to 3 units of undergraduate courses in a session. Registration as an Auditor is subject to the following conditions:

(a) The individual must receive permission from the department concerned.
(b) Admittance to the class is dependent upon the class size and other factors that the instructor and the department establish.
(c) The degree of participation in the course is at the discretion of the department.
(d) Attendance shall grant no entitlement to an academic record of such attendance and shall not be considered as meeting admission, prerequisite or course requirements for any University credit program.
(e) Graduate courses are not open to persons who are not registered in the Faculty of Graduate Studies, except as provided by the regulations of that Faculty.

INDIVIDUALLY SUPERVISED STUDIES

Individually supervised studies may be undertaken during the Winter Session; such studies will normally consist of Directed Studies courses. Students interested in pursuing such studies should contact the Advising Centre in the Faculty of Education or the appropriate department chair in the other faculties. The availability of such courses will be determined by the department concerned.

For individually supervised studies in the Summer see the Summer Studies Supplement to this Calendar.

MEDICAL REQUIREMENT

A medical examination is not compulsory except for students taking Physical Education courses. The medical examination is not provided by the University; it must be obtained at the student's own expense.

The University, through the Health Services, may require a student to take a medical examination at any time during attendance at the University. This measure exists to safeguard the medical welfare of the student body as a whole.

Students not Residents of Canada:

Students who are not residents of Canada are required to produce evidence of adequate sickness and hospital insurance coverage before registration can be considered complete.

Such students are not eligible to receive hospital or medical insurance from the Province of British Columbia until they have established residency in the Province for 12 consecutive months. In the interim they must purchase hospital and medical insurance as a condition of registration.

Further information is found under Health Services, page 26.

AVENUES OF APPEAL AND REDRESS

Students who have grounds for believing themselves unjustly treated within the University are encouraged to seek all appropriate avenues of redress or appeal open to them.

Nonacademic Matters:

Matters that are not strictly academic may be brought to the attention of appropriate University officials or bodies through the Counselling Services, the Student/Faculty Liaison Committee or similar faculty committee, the Dean or the President. In addition, the student may wish to consult the UVSS Ombudsperson (see page 28).

Academic Matters:

Academic matters fall within the purview of course instructors, the departments, the faculties and the Senate.

Depending on the nature of the academic matter of concern to the student, the order in which the student should normally seek redress is first, the course instructor; second, the departmental chair; third, the Dean of the faculty; and finally, the Senate. In addition, the student may wish to consult the UVSS Ombudsperson (see page 28). A student seeking a formal review of an assigned grade should consult the regulations on page 18.

Appeals to the Senate:

Once all the appropriate recourses have been exhausted, students may have the right of final appeal to the Senate. Except on those matters in which the sole question raised turns on the exercise of academic judgement, students may appeal to the Senate on all matters which are within the jurisdiction of the Senate as set out in the *University Act*. The Senate has delegated to its Standing Committee on Appeals the authority and responsibility to decide on behalf of the Senate all appeals from students on those matters which they may appeal to Senate. Students should lodge their appeal in writing with the Secretary of Senate and should include with the appeal a clear and precise statement of:

(a) the decision or act or treatment which is being appealed (including the name of the person or body whose decision, etc., is being appealed);
(b) the reasons why the appellant believes the appeal should be allowed;
(c) the remedy or relief which the appellant is seeking.

Unless provided for otherwise in a specific Calendar regulation an appeal to the Senate must be filed within six months of the decision being appealed.

The decisions of the Senate Committee on Appeals are final and may not be appealed to the Senate.

Petitions:

Students whose circumstances are such that an academic regulation appears to cause them undue hardship are encouraged to consult their faculty advising centre or departmental chair to determine whether the regulation is subject to waiver by the Dean of the faculty on petition by a student. The Dean's decision in such matters is final, subject to review by the Senate Committee on Appeals on grounds of specific procedural error (see above).

ACADEMIC REGULATIONS

Students should refer to the Calendar entries of the individual faculties for any additional or more specific academic regulations.

ATTENDANCE AND COURSE LOAD

Attendance at Lectures:

Students are expected to attend all lectures in each course for which they are enrolled. Any department is authorized to require a student to withdraw from a course offered by the department if the student is registered in another course such that the timetables for the two courses overlap. Admission to a lecture or laboratory may be refused by the instructor for lateness, misconduct, inattention or neglect of duty. Students who neglect their academic work, including assignments, may be debarred from the Christmas or the final examinations in a course. (See Term Assignments and Debarment from Examinations, page 17.)

Absence Consequent on Illness:

Students who are absent because of illness, an accident or family affliction should report to their instructors on return to classes.

Minimum Course Load:

Credit for courses may be accumulated by full time or part time studies in the Winter Session, or by studies in the Summer Studies. In certain programs, however, students are expected to commit themselves to studies in the Winter Session and to a specific number of units of courses; for example, Honours programs in Arts and Science require 15 to 18 units in each Winter Session. Students are therefore referred to the Calendar entries of the individual faculties for information on programs that require a commitment to a specific number of units of courses in each Winter Session.

Students should note that present regulations governing Canada Student Loans require a minimum enrollment of 9 units, and that to qualify for nearly all undergraduate scholarships, bursaries and prizes administered by the University, the terms of the awards require enrollment in a minimum of 15 units in each Winter Session, except as noted on page 334.

Maximum Course Load:

1. No student may register in more than 18 units in the period September-April.
2. No student may register in more than 9 units in either of the periods September-December and January-April.
3. No student may register in more than 9 units in the period May-August. A student registered in this period has the choice of registering in a maximum of 6 units of May-June courses or a maximum of 6 units of July-August courses.

Exceptions to these regulations require the prior written approval of the Dean.

Final Year Studies:

Normally, all students must complete the final 15 units of courses at the University of Victoria. In exceptional circumstances, however, a student may take the final year of study at another university, subject to the regulations mentioned under Graduation, page 20, and to the prior consent of the Dean of the faculty concerned.

A student authorized to attend another institution who accepts a degree from that institution abrogates any right to a University of Victoria degree until the student has satisfied the University's requirements for a second bachelor's degree. (See page 20.)

CREDIT

Accumulation of Credit:

Successful completion of a credit course entitles the student to the recording of such credit on the student's academic record. The application of such credit to a degree or diploma program, however, is subject to the regulations governing the requirements of the program. In the case of a course for which credit has been received and which is repeated, the units will be shown on the student's record in each instance but will count only once toward the degree or diploma unless the course is designated as one that may be repeated for additional credit.

Credit Limit — Introductory Statistics Courses:

The maximum allowable number of units of introductory statistics courses that may be taken for degree credit is limited to six, chosen from Biology 250, 251, 304; Economics 240, 340; Geography 300, 321; Psychology 300, 300A, 300B; Sociology 371, 372, 471; Statistics 250, 251, 253, 254.

Credit by Course Challenge:

Course challenge is intended to allow a registered undergraduate student to seek credit in a given undergraduate course on the basis of knowledge or experience acquired outside the University. It involves undertaking a special examination or other form of assessment administered by the relevant department.

Course challenge is not offered by all departments. Where it is offered, it is subject to the following restrictions:

(a) Course challenge examination/evaluation normally must be completed before the end of the period for adding courses in both Winter Session and Summer Studies, at a time determined by the department.
(b) Credit by course challenge is limited to a maximum of 15 units, or for students on a diploma program to a maximum of 3 units.
(c) No course whose equivalent appears on a student's secondary school, college or university transcript may be challenged.
(d) Once credit in a course at one level has been obtained, its prerequisite in the same subject may not be challenged.
(e) A specific course may be challenged only once.
(f) Once the examination or assessment has been administered, the result will be entered on the student's academic record. The student may not choose whether or not the result will be recorded.

Initial inquiries should be directed to Records Services, where application forms may be obtained. The course challenge fee must be paid before the challenge examination is undertaken. If the appropriate departmental chair permits a course challenge, the chair shall indicate approval by signing the application form and shall inform the student of the time at which the challenge examination will take place. Once the application has been approved, the course challenge fee is not refundable. (See para. 2(d), page 21.)

A range of authorized assessment techniques is available for evaluating the student's course challenge. Whatever technique is chosen, it shall be such that the examination procedure and the results are recorded and kept in the department.

The chair, after having approved the results, will report the grade awarded in the course challenge examination to the student and Records Services in writing.

The grade will be entered on the student's academic record and will be used in determining the student's sessional standing.

All students, including newly admitted students, are urged to complete challenge examinations before the end of the period for adding

courses, so that any course changes necessitated by the examination results can still be made.

Advanced Placement or Exemption Without Unit Credit:

In exceptional circumstances, undergraduate students may already have prepared themselves by independent study or other experience to omit a required course or courses or to undertake more advanced work than that ordinarily prescribed in the initial stages of a departmental program. Students desiring advanced placement in a particular discipline may apply to the department giving courses in that discipline for such placement.

Advanced placement or exemption from a required course carries no unit credit.

Credit for Courses Passed In a Failed Year:

A student who registers in a degree program may apply for credit in courses which were passed within a "failed year" either at the University of Victoria (prior to 1970-71) or at another university or college and which are applicable to the student's degree program but for which University credit was not previously granted.

Application for credit in such courses passed at the University of Victoria must be made in writing to Records Services.

Application for credit in such courses passed at other institutions must be made in writing to: The Senate Committee on Admission and Reregistration, c/o Records Services, University of Victoria. The Committee will judge each case separately on its own merits.

REPEATING COURSES

A required course in which a passing grade has not been obtained must be repeated or a permissible substitute taken in the next session attended. However, no course may be taken more than twice unless the course is a required course that is outside the student's main area(s) of study.

No student may repeat a course for additional credit unless the course entry specifically states the course may be so repeated.

PROMOTION

Students may not proceed to courses in a higher year unless they take concurrently all courses required to clear deficiencies in the lower years, subject to the limitations mentioned above. Students may proceed only to courses for which they have successfully completed prerequisites to the satisfaction of the department concerned.

CHEATING

The standards and reputation of any university are the shared responsibility of its faculty and students. Within the obvious limits implicit in the difference between undergraduate work and specialized research, students at the University of Victoria are therefore expected to observe the same standards of scholarly integrity as their academic and professional counterparts. Clearly, a large part of the work done at the undergraduate level must involve the handling at second hand of ideas and material originally conceived or made accessible by others. Equally clearly, however, there is a difference between the use of an acknowledged restatement of such ideas and material after intelligent and critical assimilation and their unacknowledged, literal reproduction in the guise of new and original work. The latter amounts to cheating; and cheating, whether it take the specific form of *verbatim* and unacknowledged copying from the writing of others (also see Duplicate Essays, below), or whether it appears in other forms, such as the fraudulent manipulation of laboratory processes in order to achieve desired results, the use of commercially prepared essays in place of a student's own work or reference to unauthorized materials in examination circumstances, vitiates the purposes of a university education. While such practices may well stop short of "crime" in the sense that they may escape from the formal rigours of the law, they nevertheless constitute in all cases an offence against intellectual honesty. This renders forfeit not only the integrity of the individual involved but also the reputation of those who condone such lapses. Sanctions will therefore be enforced against cheating, ranging in severity as befits the individual case from simple reimposition of work, through forfeiture of credit for the particular assignment or the particular course involved, to possible suspension from the University in the most extreme, deliberate or persistent cases.

Offences of this kind may, however, occur in a multitude of different ways and circumstances in different disciplines, and, especially at the undergraduate level, their fair treatment will frequently entail the consideration of contingent factors. These require the flexible exercise of equitable jurisdiction at all levels from the individual instructor upwards. The University as a whole does not therefore propound a single comprehensive definition of cheating in all its shapes and forms beyond the general statement of position and principle herein advanced; nor does it specify an invariable code of pains and penalties. It does, however, reserve to its academic departments severally the power, under normal circumstances, to inculcate and enforce proper standards of scholarly integrity by whatever internal procedures seem most appropriate to their respective disciplines, saving only that in matters involving student breaches of academic ethics, appeal may be made to the President if either party to the case so desires.

IMPROPER BEHAVIOUR AND UNAUTHORIZED ACTIVITIES

Any student (a) whose behaviour causes or is likely to cause wrongful injury to any person or damage to the University or its property, or (b) who violates the British Columbia liquor regulations within the precincts of the University, or (c) who unlawfully enters a building on the campus, will be reported to the President for disciplinary action and may be suspended, subject to appeal to the Senate.

Sexual Harassment:

The University of Victoria does not condone sexual harassment and seeks to prevent sexual harassment of its students and employees. Unwelcome sexual advances, requests for sexual favours or other verbal or physical conduct of a sexual nature may constitute sexual harassment. Questions or complaints may be discussed with one of four appointed advisers who will explain the options available through University policy or collective agreements. Sexual Harassment Advisers are listed in the Campus Telephone Directory. The full text of policy and procedures is available from the Advisers, UVSS Ombudsperson, and Counselling Services.

GRADING SYSTEM

	Grade Point Value	
Passing Grades:		
A+	9	First Class
A	8	
A-	7	
B+	6	Second Class
B	5	
B-	4	
C+	3	Pass
C	2	
D	1	Marginal Pass
*COM	N/A	Complete (pass)
Failing Grades:		
E	0	Conditional supplemental
F	0	No supplemental
N	0	Did not write examination or otherwise complete course requirements by the end of the term or session; no supplemental
Temporary Grades:		
* INC	N/A	Incomplete
* DEF	N/A	Deferred status granted
* INP	N/A	In Progress
* CIC	N/A	Coop Interrupted Course

* COM — used only for 0 unit courses and those credit courses designated by the Senate. Such courses are identified in the course listings.

* INC — used for those Winter Session credit courses designated by the Senate, to be replaced by a final grade by June 1 (except for Education 799, by August 1). Such courses are identified in the course listings.
* DEF — Used only when deferred status has been granted because of illness, an accident or family affliction. (See below.)
* INP — used only for courses designated by the Senate, to be replaced by a final grade by the end of the next Winter Session. If the student does not reregister then the final grade will be N. Such courses are identified in the course listings.
* CIC — see paragraph 12, page 33.

For letter grades authorized for use in the Faculty of Graduate Studies and Faculty of Law, see entries under those faculties.

The table shown above constitutes the official University grading system used by instructors in arriving at final assessments of student performance.

Numerical Scores:

A department may authorize the use of numerical scores or marks in courses, where appropriate, but each numerical score or mark must in the end be converted to a letter grade. Where a department authorizes the use of a numerical system in its courses, it is the responsibility of the instructor to inform the students in the course of the relationships between the departmental numerical system and the University letter grade system.

EVALUATION OF STUDENT ACHIEVEMENT

Assessment Techniques:

For the purposes of evaluating student performance, each department shall formally adopt those assessment techniques which the department considers generally appropriate for its courses, taking care to ensure that instructors within the department have some options.

Techniques commonly used, where appropriate, include the following: assignments; essays; oral or written tests, including midterms; participation in class discussions; seminar presentations; artistic performances; professional practica; laboratory examinations; "open book" or "take-home" examinations; and examinations administered by the instructor or Records Services during formal examination periods. Self evaluation is not permitted to determine the grade in any course, in whole or in part.

Final examinations, other than language orals or laboratory examinations, shall be administered during formal examination periods. Regardless of the techniques chosen by a department, tests counting for more than 15 per cent of the final grade shall not be administered, in any regular thirteen week term, during the last two weeks of classes or in the interval between the last day of classes and the first day of examinations, or, in any Summer Studies course, during the three class days preceding the last day of the course. Neither the department nor the instructor, even with the apparent consent of the class, has the right to set aside these regulations. No instructor may schedule any test that conflicts with the students' other courses or any examination that conflicts with the students' other examinations in the official examination timetable. No instructor may schedule any test during the last two weeks of classes in a regular thirteen week term unless an advance notice of six weeks has been given to the students in the course.

When beginning a course, the instructor is responsible for ensuring that the departmental chair and the students in the course are informed in writing:

a) of the technique or combination of techniques to be used in the assessment of students' performance in the course;
b) of how assignments, tests and other work of the course will be evaluated and the weight which generally will be given to each part of the course;
c) where numerical marks form the basis of the evaluation of the course or any part of the course, of the mechanism to be used in converting the marks to final letter grades.

Reviews of final grades are governed by the regulations on page 18.

Correction and Return of Student Work:

Instructors are normally to return all student work submitted that will count toward the final grade, except final examinations.

Instructors are to give corrective comments on all assigned work submitted and, if requested to do so by the student, on final examinations.

Laboratory Work:

In any course which includes laboratory work students will be required to make satisfactory standing in both parts of the course. Results in laboratory work will be announced by the department concerned prior to the final examinations, and students who have not obtained a grade of at least D will be permitted neither to write the examination nor to receive any credit for the course. If satisfactory standing is obtained in the laboratory work only and the course is repeated, exemption from the laboratory work may be granted with the consent of the department. The same rules may, at the discretion of the departments concerned, apply to nonscience courses with laboratory work.

Duplicate Essays:

An essay or assignment to be submitted for two courses is acceptable only when both instructors have been informed of the student's intention to submit a duplicate essay or assignment and have given their written permission to the student.

In instances where essays or assignments essentially the same in content are submitted in more than one course without prior written permission of the instructors, partial or total credit for the essay or assignment may be withheld in any or all of the courses involved.

Term Assignments and Debarment from Examinations:

In some courses students may be assigned a final grade of N or debarred from writing final examinations if the required term work has not been completed to the satisfaction of the department concerned. Instructors in such courses shall advise students of the standard required in term assignments and of the circumstances under which they would be assigned a final grade of N or debarred from examinations.

English Deficiency:

Term essays and examination papers will be refused a passing grade if they are deficient in English; and, in this event, students will be required to pass a special examination in English to be set by the Department of English.

Examinations:

Examinations in the Winter Session are held in December and April.

Timetables are posted on official University bulletin boards at least two weeks before the dates announced for the beginning of December and April examinations.

Illness, Accident or Family Affliction at Examination Time:

1. A student who falls ill during an examination or misses an examination because of illness, an accident, or family affliction may be eligible for a deferred examination.
2. A student who, though suffering from illness, an accident, or family affliction writes a final examination may also be eligible for a deferred examination.
3. A student may also apply for deferred status to complete required term work.
4. In all the above cases a "Request for Academic Concession" must be applied for at Records Services normally within ten working days of the end of the examination period. Supporting documentation must accompany the request. Records Services will communicate with the department concerned for approval of deferred status. If deferred status is not granted, the instructor will submit a final grade. If deferred status is granted, the work of the course must be completed by the end of Summer Studies for Winter Session courses, and by the end of the first term in the Winter Session for Summer Studies courses.
5. Deferred examinations are granted only where final examinations are involved. In cases where the instructor does not give a deferred examination but assigns a final grade based on an assessment of the student's performance in the course work, the grade will appear on the student's record with the notation "AEG" (Aegrotat, see Glossary, page 6).
6. For courses finishing in April, deferred examinations are normally held about the beginning of August. For courses which finish in December and are prerequisite to courses starting in January, deferred examinations are normally held by the end of the first two weeks in January. For courses which finish in December and are also offered in the second term, deferred examinations may be given in

April. For other courses, deferred examinations are scheduled by arrangement.
7. The final grade obtained in a course in which deferred status has been granted will be used in calculating the sessional grade point average. If the work is not completed by the specified date, the final grade for the course becomes N.

Regulations Governing Administration of University Examinations:

1. Candidates may not enter the examination room until invited to do so by the invigilator in charge.
2. Candidates are not permitted to enter the examination room after the expiration of one half hour, nor leave during the first half hour of examination. Invigilators should send unusual cases to Records Services at once.
3. Candidates shall not make use of any books or papers other than those provided by the invigilators or authorized by the instructor in charge of the course.
4. Candidates shall not communicate in any way with each other. Candidates are not permitted to ask questions of the invigilator, except in cases of supposed errors in the papers.
5. A candidate who believes there is an error in a paper should report it immediately to the invigilator, and, after the examination, report the error in writing to Records Services. If there are other reasons for complaint, the candidate should communicate with that office within 24 hours.
6. Candidates may not leave the examination room without first delivering their examination booklets to the invigilator.
7. Candidates are advised not to write extraneous material in examination booklets.
8. Candidates who wish to speak to the invigilator should raise their hand or rise in their place.
9. Candidates may be called upon by an invigilator to produce identification papers bearing a photograph to prove their identity.
10. Candidates leaving or entering examination rooms should do so quietly in order not to disturb others. Having left the examination room, candidates are asked not to gather in adjacent corridors, lest they disturb candidates who are still writing.
11. Smoking is not permitted.
12. Candidates who fall ill during an examination should report at once to the invigilator.
13. Candidates who fall ill or suffer an accident or family affliction before an examination should report the circumstances immediately to Records Services.
14. In cases of extreme misconduct, invigilators are empowered to expel candidates from an examination room. Under such circumstances, candidates may be required to withdraw from the University following an investigation of circumstances surrounding the misconduct.
15. Invigilators may require candidates to remain quietly in their seats for the last 15 minutes of the examination.

Release of Grades:

Instructors are permitted to release final grades informally to students in their classes, on request, as soon as the grades have been forwarded to Records Services by the department, on the understanding that formal approval and release is the prerogative of the Senate. Following authorization by the Senate statements of final grades are mailed to students by Records Services (about the end of May for Winter Session courses and early in September for Summer Studies courses).

First term results for full year courses are released by the instructors, not by Records Services.

Student Access to Final Examinations:

All final examinations are stored in the departmental office or the Records Services Office for six months after the official release of grades except when a review of an assigned grade or an appeal to the Senate Committee on Appeals is in progress. In the case of a review of an assigned grade the relevant material will be retained for a further six months. In the case of an appeal to the Senate the relevant material will be retained for six months after a final decision has been reached. Students are permitted access to final examination questions and their own answers on request to their instructors or departmental chairs after the grades have been submitted to the Records Services Office by the departments. This access to the final examinations does not constitute a request for a review of an assigned grade. Students wishing to have grades reviewed should follow the procedure outlined in the following section. Students are allowed to purchase a photocopy of their own final examination answer papers and, unless withheld by the instructor with the agreement of the departmental chair, of the final examination questions.

Review of an Assigned Grade:

Final Grades: Reviews of final grades are governed by the following regulations, subject to any specific regulations adopted by the faculties:

1. Any request for review of a final grade must normally reach Records Services within 21 days after the release of grades.
2. Each applicant must state clearly in writing the grounds for believing that the grade awarded should be raised.
3. Students should retain all written work returned to them by the instructor during the term and make such work available where the grade to be reviewed has involved such term work.
4. It is the responsibility of each of the faculties to ensure that steps are adopted to be followed in the carrying out of reviews of grades assigned in courses offered within the faculty, and that such procedures provide for examination of the review results by a person or persons not directly involved. Wherever possible, every effort should be made to complete the review process within 21 days after the receipt of the application for review.
5. The grade determined by means of a review shall be recorded as the final official grade, irrespective of whether it is identical to, or higher or lower than, the original grade.

NOTES: Prior to application, a student considering a request for a formal review of a final grade ought to make every reasonable effort to discuss the assigned grade with the instructor. Mathematical marking errors will be rectified without recourse to the review procedures. (See Student Access to Final Examinations, above.)

Requests for review or other consideration based on compassionate grounds such as illness are governed by separate regulations (see Illness, Accident or Family Affliction, above).

Prospective applicants are advised that examination papers assigned E or F grades (and D grades in some faculties) are automatically read at least a second time before the grades are recorded. For that reason, an applicant who is eligible for a supplemental examination should prepare for the examination since a change in grade might not be available before the time of the supplemental examination.

Grades for Term Work: During the session, students who believe that a grade awarded for term work is unfair should discuss the matter informally with the instructor concerned. If discussion with the instructor fails to resolve the matter, the student should appeal directly to the chair of the department.

Undergraduate Supplemental Examinations:

The following regulations apply to students in all programs except those in B.Eng., LL.B., Master's and Ph.D. programs (see regulations of the faculties of Engineering, Law and Graduate Studies).

Supplemental examinations are not offered by all departments. Students will be advised whether or not a supplemental examination will be offered when assessment techniques are announced at the beginning of the courses.

The following departments do not offer supplemental examinations:
Anthropology
Chemistry
French Language & Literature
Hispanic and Italian Studies
Medieval Studies
Slavonic Studies
Sociology
Women's Studies
Arts in Education
Communication and Social Foundations
Physical Education
Psychological Foundations
Creative Writing
Music
Child and Youth Care
Nursing
Social Work
Public Administration

Where supplemental examinations are permitted by a department, they are governed by the conditions shown below and the regulations that follow:

1. Students may apply to write a supplemental examination in a course only if they have written a final examination and have received a final grade of E in the course.
2. Students taking 15 or more units in the Winter Session will be granted supplemental examinations only if they have passed at least 12 units of courses in that session. The maximum number of units of supplemental examinations allowed is normally 3. However, the Dean of the student's faculty may authorize supplemental examinations in an additional 3 units if the student will complete a degree by passing all the supplemental examinations granted.
3. Students enrolled in Summer Studies courses or taking fewer than 15 units in the Winter Session may be granted supplemental examinations for no more than 3 units, each such case being judged on the basis of the student's overall standing by the Dean of the student's faculty.
4. A student in the final year of a degree program who obtains a failing grade in a supplemental examination, may be granted a second such examination, at the discretion of the Dean of the student's faculty, if a passing grade in the second examination will complete the student's degree requirements.
5. A student who obtains a grade of E in a course completed in December may, if eligible, either repeat the course in the Second Term if it is offered or write a supplemental examination in August.

Any passing grade obtained on a supplemental examination will be shown in the student's academic record with a grade point value of 1, corresponding to a D, and will be taken into account in the determination of the graduating average and the class of degree, but will not affect the sessional grade point average.

Supplemental examinations cover only the course work covered by written final examinations. If there was no written final examination in the course, or if a passing grade in a supplemental examination will not yield an overall passing grade in the course, a supplemental examination will not be provided.

Supplemental examinations for Summer Studies courses and for courses taken by students who are in attendance only during the First Term of the Winter Session are arranged in consultation with the Dean who grants them. Supplemental examinations for all other courses taken in the Winter Session are written about the beginning of August.

Students who fail to write a supplemental examination at the scheduled time forfeit both their eligibility and any fees paid for the supplemental.

Applications for supplemental examinations, accompanied by the necessary fees, must reach Records Services by the following dates:

(a) Courses taken by students in attendance only during the First Term, Winter Session — February 15;
(b) All other Winter Session courses — July 1;
(c) Summer Studies courses — October 15.

Supplemental examinations for courses mentioned in (a) and (c), above, are scheduled by arrangement. Those for courses mentioned in (b), above, may be written at the University as well as the following British Columbia centres: Cranbrook, Dawson Creek, Kamloops, Kitimat, Penticton, Powell River, Prince George, Prince Rupert, Trail, Vancouver; and at Whitehorse, Y.T. Other centres outside British Columbia are restricted to universities or colleges.

For fees for supplemental examinations, see para. 7 (g), page 22.

STANDING

Sessional Grade Point Average:

The sessional grade point average is based only on courses which have a unit value. Courses bearing the grade COM are ignored.

(A grade point average is found by multiplying the grade point value of each final grade by the number of units, totalling the grade points for all the grades, and dividing the total grade points by the total number of units.)

Academic Probation and Minimum Sessional Grade Point Average:

The following regulation applies in all Faculties. Individual Faculties may set higher grade point averages.

Undergraduates who fail to obtain a sessional grade point average of at least 2.00* (or equivalent if a University of Victoria student takes courses elsewhere for credit towards a University of Victoria program) are considered to have unsatisfactory standing and will be placed on academic probation for the next session attended. Furthermore those students registered in a session in 4.5 units or more, whose grade point averages are less than 1.00 will be required to withdraw, normally for one academic year. If such a student has already started May-June courses or May-August courses, before notification of probation, these courses may be completed, but the student will be required to then withdraw, normally for one academic year.

Those students registered in a session in less than 4.5 units whose grade point averages are less than 1.00 will be placed on probation for the next session attended. A student who is on probation and then registerse in 4.5 units or less in the next session attended, and obtains a gpa of 2.00 or greater, will NOT be taken off probation automatically for the next session attended. A review will be made of the student's record by the Dean's office concerned, and the student will be informed of the Dean's decision.

A student who has a marginal record upon admission may be placed on probation by the Senate Committee on Admission and Reregistration.

A student who is on academic probation and whose sessional grade point average falls below 2.00* (or equivalent if a University of Victoria student takes courses elsewhere for credit towards a University of Victoria program) will be required to withdraw regardless of the registered unit total, normally for one academic year. The student will also be placed on academic probation for the next session attended.

A student who is required to withdraw a second time will not be permitted to register for credit courses at the University for at least five years.

In all cases students will be notified by Admission Services or Records Services that they have been placed on probation. Such students may wish to seek assistance from the appropriate Advising Centre or Faculty Dean's Office, Counselling Services, or to take the Reading Course and Study Skills Course or Workshops which are offered to all students by Counselling Services.

Depending upon a student's performance during the period of probation, the Dean may at any time either remove the student from probation for the remainder of the session, or acting on a decision of the faculty require that the student withdraw from the University. (See below: Withdrawal for Unsatisfactory Progress.)

Students who are on probation in a session are not eligible for authorization or registration in the subsequent session until their current sessional grade point average has been determined.

This regulation governs all sessions, including Summer Studies (the period May through August).

* Individual Faculties may set a higher grade point average.

WITHDRAWAL

A student may be suspended or may be required to withdraw from the University at any time for unsatisfactory conduct or for failure to abide by regulations. (See regulations of the individual faculties concerning mandatory withdrawal.)

Voluntary Withdrawal:

Any undergraduate student who after registration decides to withdraw from the University must notify Records Services in writing. It is recommended that students visit Counselling Services to discuss their decision and plans and visit their Faculty Advising Centre to discuss their academic status and prospects, before going to Records Services. Students in the Faculty of Law should speak with the Dean. Students who are prevented by circumstances from withdrawing in person must do so by letter addressed to Records Services. Students will be required to obtain clearance from the University, to the satisfaction of Records Services, before being recommended, where applicable, for refund of fees.

Students in the Faculty of Graduate Studies should consult the Dean before giving formal notice of withdrawal.

(See Changes in Registration, paragraph 2, page 13 and dates on pages 3 and 4. Summer Studies students: See Summer Studies Supplement.

Withdrawal for Unsatisfactory Progress During a Session:

Any undergraduate student who has been placed on probation and whose progress is deemed unsatisfactory, may upon the decision of the faculty and on notification by Records Services, be required to withdraw from the University for the remainder of the session. A student so required to withdraw may appeal to the Senate for a review of the case by lodging a written appeal with the Secretary of Senate. (See Avenues of Appeal and Redress, page 14.)

GRADUATION

Application for Graduation:

Senate grants degrees in November and May each year. Each candidate for a degree, diploma or certificate must make formal application for graduation when registering in the final Summer or Winter Session preceding the candidate's anticipated graduation. Candidates who have received permission to complete a course or courses elsewhere must apply for graduation not later than July 1 for fall graduation or December 1 for spring graduation. Special forms for this purpose are available from Records Services.

Minimum Degree Requirements for Graduation:

Each candidate for a first Bachelor's degree (in a faculty other than Law) is required:

(a) To have satisfied the University English requirement (see page 13);
(b) to present credit in a minimum of 60 units of university level courses numbered 100 and above; at least 21 of the units must be numbered at the 300 or 400 level, and at least 30 of the units must normally be in University of Victoria courses. (See Limitations on Transfer Credit, page 10, Credit by Course Challenge, page 15, A Second Bachelor's Degree, below, and graduation requirements of the Faculty of Education.)
(c) to meet the specific degree and program requirements prescribed by the undergraduate faculty in which the candidate is registered.

Standing at Graduation:

(a) Graduating Average

The graduating average of a student in a bachelor's degree program other than Engineering and Law shall be determined as the weighted average of the grade point values of the letter grades (other than COM) assigned to 300 and 400 level courses taken or challenged at this University and accepted for credit in the student's degree program in the faculty concerned. If the total unit value of all such courses does not exceed 30, all such courses will be included in the average. If the total exceeds 30 the average will be taken on a maximum of 30 units of such courses chosen so as to give the highest average, including, where necessary, the appropriate fraction of a course. A course which has been used to satisfy the requirements for one degree or which has been used in the calculation of the student's graduating average for one degree, cannot be used for credit towards another degree. Students who have completed or plan to complete more than 30 units of upper level courses, some of which they intend to apply to the requirements of a second degree, must advise the Dean of their faculty at least two months before graduating from their first degree program (see A Second Bachelor's Degree, below).

Students must have a graduating gpa of at least 2.00 in order to graduate.

(b) Class of Degree

Students whose graduating averages are 3.50 or higher will be placed in one of the following classes on the basis of the graduating average, subject to any additional requirements specified by the individual faculties and their departments with respect to standing at graduation:

(a) First Class, an average of 6.50 or higher;
(b) Second Class, an average from 3.50 to 6.49.

Graduation Exercises:

The formal conferral of degrees takes place at a Convocation ceremony in the fall and spring each year. Graduates become members of the Convocation of the University as soon as their degrees are granted by the Senate.

A SECOND BACHELOR'S DEGREE

Under the following conditions, a student who has a bachelor's degree from the University of Victoria or another recognized institution may be allowed to pursue undergraduate studies leading to a second bachelor's degree:

(a) The student must be admissible to the program of the second degree.
(b) The principal area of study or academic emphasis of the second degree must be distinct from that of the first degree.
(c) At least 30 units of credit must be completed, beyond those units required for the first degree; normally, 21 of these 30 must be at the 300 or 400 level.
(d) The student must meet all program and graduation requirements for the second degree beyond those required for the first degree.

In certain cases, it may be possible to complete the requirements of two University of Victoria degrees concurrently, subject in all cases to the conditions mentioned above.

Application to pursue a second bachelor's degree should be made at the time of application for admission or reregistration, as appropriate (see pages 7 to 12). Students currently enrolled in their first bachelor's degree program should make application to the Dean of the appropriate faculty.

The University reserves the right to limit the number of students admitted to the University for the purposes of completing a second bachelor's degree.

Note: students who have completed or plan to complete courses which they expect to apply towards the requirements for a second degree should check with the Deans of their faculties at least two months before graduating from their first degree programs to determine if they will be able to include these courses in their second degree programs.

TRANSCRIPT OF ACADEMIC RECORD

On request of the student, a certified transcript of the student's academic record will be mailed by Records Services direct to the institution or agency indicated in the request. Each transcript shall include the student's complete record at the University to date. Since standing is determined by the results of all final grades in the session, transcripts are not available for first term grades until the end of the session, unless the student has attended the first term only.

Students' records are confidential. Transcripts are issued only at the request of students or appropriate agencies or officials.

Application for a transcript should be made at least one week before the document is required.

Fees for transcripts of academic record: see para. 7 (h), page 22.

FEES

NOTICE

It may be necessary to change fees from the levels shown. Notice of any required changes will be given as far in advance as possible by means of a Calendar Supplement.

1. PAYMENT OF ACCOUNTS

(a) The obligation to pay fees for a course or program is incurred upon registration, subject only to adjustments for officially recorded course drops, withdrawal, cancellation of registration or change of status.

(b) Students are requested to make their payments through bank branches or banking machines. Forms for this purpose are inserted in Telephone Registration Guides or may be obtained at Accounting Services.

(c) A deposit payment is required for certain programs. See 2(a), 3(b) and 5(a) below.

(d) Payment of fees is due by the following dates:
First term ..... September 30
Second term ..... January 31
Any additional fee charges resulting from subsequent changes in registration are due by the end of the month in which such changes are made.

(e) Fees for a term comprise:
full tuition for term courses taken that term,
one half tuition for full year courses/programs taken that term,
any other fees assessed for that term.

(f) Students are responsible for ascertaining the courses in which they are registered. When using the telephone registration system, students should always conclude their call by requesting to hear the list (L) of courses in which they are registered since fees will be assessed accordingly.

(g) Students are also responsible for ascertaining their fees from this Calendar and any Calendar Supplements or from statements of account available at Accounting Services. Graduate students are also required to consult Graduate Records about their initial assessments and the effect of subsequent changes in registration.

(h) Statements of account are not mailed in advance, but may be collected at Accounting Services one week prior to September 30 and January 31. Payment must be made by due dates whether or not a statement of account is received. *Failure to pay full fees by October 31 in the first term or by February 28 in the second term results in cancellation of registration.*

(i) A service charge of 2% (but not less than $2.00) is added to accounts not paid by their due date, and at each month end thereafter that they remain unpaid.

(j) Students with overdue accounts are subject to denial of services. These services include reregistration; use of libraries; access to classes and examinations; issue of loans, awards, grades, transcripts, degrees and documents certifying enrollment or registered status.

(k) Students who withdraw or otherwise leave the University remain liable for settlement of unpaid accounts. The University may seek to enforce its rights as a creditor through legal action or the use of collection agencies. Legal and collection costs incurred by the University in this process are added to students' accounts.

2. FEES FOR UNDERGRADUATE PROGRAMS OTHER THAN LAW

(a) A registration deposit of $100.00 must be received at Accounting Services before a student can gain access to the telephone registration system. This deposit is payable regardless of any loan, scholarship or sponsorship arrangements. It is applied to the student's fee account, but is forfeited if the student withdraws. If the deposit payment is returned NSF, the student's registration is cancelled.

(b) Courses are assigned a fee unit value for the purpose of tuition fee assessment. This fee unit value is equal to the credit unit value except for the following courses:

	Credit Units	Fee Units
All ART courses (except 150)	1.5	1.6
All ART courses (except 350)	3.0	3.2
All ART courses	6.0	6.4
All ART courses	12.0	12.8
A E 200, 201, 205, 208, 305, 306, 307, 308, 309, 310, 319, 320, 321, 322, 402A, 402B, 402C, 402D, 402E, 402F, 402H	1.5	1.7
A E 101	2.0	2.3
A E 103, 303	3.0	3.4
Business School	1.5	1.7
Business School	3.0	3.3
C Y C 460 (F50)	1.5	2.4
ED-B 359	1.0	1.2
ED-B 360, 361	1.5	2.0
ED-E 499 (F50)	1.5	2.5
ED-P 494	1.5	3.5
ED-P 497	1.5	3.5
ED-P 497	3.0	6.5
ELEC 395, ENGR 446	1.0	1.1
All other ENGR, CENG, ELEC and MECH courses	1.5	1.6
GEOG 325	1.5	1.8
GEOG 427	1.5	1.9
H A 488, 489	1.5	4.6
MUS 140, 240, 340, 440	2.0	2.4
MUS 145	3.0	3.7
MUS 245, 345, 445	6.0	6.7
NURS 302 (Distance Education)	3.0	4.0
NURS 309 (F50,S50)	1.5	2.2
P E 126	.5	.7
P E 127	.5	.9
P E 129, 130	.5	.8
P E 128, 132	.5	1.0
P E 131	.5	1.3
RUSS 304	1.5	1.6
THEA 240, 245, 340, 341, 342, 343	3.0	3.4
THEA 343	1.5	1.7

(c) Tuition, per fee unit 118.00

(d) Course challenge, per fee unit 59.00
May be waived for students who have completed a noncredit diploma program and paid equivalent credit program fees - apply to University Extension

(e) Coop program, per work term 236.00

(f) Coop work term challenge 118.00

(g) Students taking on campus courses, per term

	4½ credit units or more	Less than 4½ credit units
UVic Students' Society - activity	26.50	13.25
- building fund	10.00	5.00
- additional passed by referendum	5.00	2.50
Athletics/Recreation	20.00	10.00

(h) UVic Students' Society health plan - students taking on campus courses
3 or more credit units in the first term, or 6 or more credit units in the session (including first term units) ... 64.20
3 or more credit units in the second term (but no first term units) 42.80
Students must initially pay their premiums but can apply before October 18 (February 14 in case of second term) through the UVic Students Society to opt out of the plan and obtain a refund if they carry acceptable alternative coverage. Students' Society health plan coverage is supplemental to and is not a replacement for the B.C. Medical Services plan which provides basic primary coverage for those eligible B.C. residents who apply and pay premiums.

(i) Students applying to graduate
Graduation 25.00
UVic Students Society graduating class 10.00

3. FEES FOR FACULTY OF LAW

(a) Application 40.00

(b) First year acceptance deposits
Upon acceptance $200.00 ($50.00 refundable if student withdraws by June 30)
By June 30 a further $200.00 ($100.00 refundable if student withdraws by August 9)

(c) Tuition -full time, per term 1,131.50
full time is defined as 6 or more fee units per term
-part time, per fee unit 150.00

(d) Coop program, per work term 252.00

(e) Law Students Society, per session 15.00

(f) Athletics/Recreation, UVic Students Society and Graduation fees
As shown in Section 2.

4. FEES FOR VISA STUDENTS

(a) Visa students (those not holding Canadian citizenship or landed immigrant status at the commencement of the session) are required to pay tuition fees at 1.75 times the rates shown in preceding sections.

(b) Where reciprocal agreements exist, visa students are exempted from these differential fees.

(c) No differential fees are charged for History in Art 486, 487, 488, 489, 490 and 491.

(d) Sickness and hospital insurance fee (subject to change) - see Health Services, page 26:
Undergraduates and graduates up to age 30 ..... 121.00
Graduates over age 30 ..... 218.00

5. FEES FOR GRADUATE PROGRAMS

There is a minimum fee for all graduate degree programs. The unit of payment is a "fee installment." The minimum program fee for a Master's degree is 5 full fee installments (or a combination of full and half installments amounting to a total of 5 full fee installments). The minimum program fee for a Ph.D. degree is 7.5 full fee installments (or a combination of full and half installments amounting to a total of 7.5 full fee installments). See (d) and (e) below for details.

Fees are charged for every term that a student is registered in a degree program. For this purpose, a "term" means all or part of one of the following periods: September-December; January-April; May-August. Students classified as "full time" will be charged a full fee installment (see (b) below). Students classified as "part time" will be charged a half fee installment (see (b) below).

Students classified as "nondegree" pay for courses on a per unit basis (see (b) below).

(a) Acceptance deposit 100.00
Forfeited if student does not register, but $50.00 refundable if withdrawal of application received 28 days prior to classes.

(b) Tuition: full fee installment (per term) 754.00
half fee installment (per term) 377.00
non-degree (per unit) 252.00

(c) There are additional fees for the following courses. These fees do not form part of the minimum program fee required under paragraphs (d) or (e).
Music 540 ..... 44.00
Music 545 ..... 87.00
Theatre 508, 509, 510, 520, 521, 523 (3 units) 44.00
(1½ units) 22.00

(d) Payment of 5 full fee installments is required for the Master's degree. However, if all program requirements are completed within 16 consecutive months of the start date of the program, this will be reduced to 4.

(e) Payment of 7½ full fee installments is required for a Doctoral degree. Students who transfer from a Master's to a Doctoral program, without completing the Master's degree, will have those fee installments paid during the first 16 consecutive months of the Master's program credited to their Doctoral fee requirement. Any fees paid after this time cannot be credited to the Doctoral fee requirement.

(f) If the minimum number of fee installments for their degree have not been paid by the final session before graduation, students must pay the outstanding installments at the time they complete final degree requirements. Students owing outstanding fee installments will not be awarded their degree until payment is made. Students expecting to complete their academic requirements are strongly advised to contact the Graduate Admissions and Records Office to clarify their fee installment status.

(g) Registration fees are required from students who have paid the fee installments for their degree but have not completed program requirements. They are assessed after: 24 months from the start date of the Master's program (excluding M.P.A. students, for whom the installment point will be 36 months if in the regular program, and 48 months if in the combined LL.B/M.P.A. program); 36 months from the start date of the Doctoral program (for students in a Ph.D program composed of less than 45 units); 48 months from the start date of the Doctoral program (for students in a Ph.D. program composed of 45 units or more). Students enrolled in the cooperative education option will have 8 months added to the relevant Master's time period and 12 months added to the relevant time period for the Ph.D.
Reregistration fees are assessed according to the following schedule:
Until maximum completion limits per term 252.00
Thereafter, per term 754.00

(h) Tuition fees paid by nondegree students do not count towards the fee installment requirement for a degree.

(i) Cooperative program fee, per work term 252.00
This fee does not form part of the minimum program fee required under paragraphs (d) or (e).

(j) Athletics/Recreation, per term 20.00

(k) Graduate Students Society, per term
Activity 9.50
Building Fund 13.50

(l) Graduation 25.00

(m) Visa student sickness and hospital insurance fee - see 4(d) above.

6. FEES FOR AUDITORS

(a) Under age 65, per fee unit -undergraduate 59.00
-graduate 126.00

(b) Age 65 or over, per fee unit -undergraduate 20.00
-graduate 42.00

7. MISCELLANEOUS FEES

(a) Preliminary application for admission 10.00

(b) Application for admission 15.00

(c) Document evaluation 25.00

(d) Late registration 35.00

(e) Returned cheque 10.00

(f) Reinstatement 10% of unpaid account (minimum $25; maximum $75)

(g) Supplemental examination-per paper -on campus 45.00
-off campus 55.00

(h) Transcripts, per request-first copy 5.00
-additional copies, each 2.00

(i) Education Deduction and Tuition Certificate replacements and fee payment confirmations 4.00

(j) Calendar mailing charge-outside Canada 8.00
-inside Canada 6.00

(k) Language 11 Equivalency Test 118.00

(l) Graduation certificate-replacement 40.00
-certified copy 5.00

(m) Document fee - per copy 2.00

8. FEE REDUCTIONS FOR DROPPED COURSES, WITHDRAWAL, CANCELLATION OF REGISTRATION AND CHANGE OF STATUS

(a) To obtain fee reductions, students must submit written notice of changes in registration to Records Services or Graduate Records when they take place. Where fee reductions are granted, they will be based on the date that written notice is received.

(b) Deadlines for obtaining fee reductions are different from academic drop deadlines.

(c) Tuition fee reductions—undergraduate students and auditors in undergraduate courses.

First term courses and first half of full year courses

On or before September 17	100%
October 8	50%

Second term courses and second half of full year courses

On or before January 19	100%
February 9	50%

For courses with unusual start dates or shorter durations, tuition fee reductions are as follows. Days shown are calendar (not lecture).

Duration	100% reduction	50% reduction
1-5 days	First 0 days	Next 0 days
6-14	1	0
15-31	5	0
32-62	7	7
63 or more	14	21

All tuition fee reductions are subject to retention of the registration deposit described in 2(a).

(d) Tuition fee reductions—graduate students and auditors in graduate courses.

First term assessments

On or before September 17	100%
October 8	50%

Second term assessments

On or before January 19	100%
February 9	50%

(e) Athletics/Recreation and Students Society fees will be reduced by 50% where students withdraw by October 8 or February 9.

9. GENERAL FEE REGULATIONS

(a) The University reserves the right to change fees without notice.

(b) Students registering in Summer Studies should consult the Summer Studies Calendar Supplement.

(c) Proceeds of undergraduate awards received or granted by the University are credited to fee accounts.

(d) First term overpayments and other credits are applied to second term fees owing and will not be refunded when there is an outstanding second term balance. Payments and other credits in excess of sessional fee charges are applied to other unpaid accounts. Any remaining credit balance for a session is refunded on request.

(e) Tuition fees for credit courses are exempt from the Goods and Services Tax (GST) but GST may be exigible on certain other fees.

ACADEMIC SERVICES

UNIVERSITY OF VICTORIA LIBRARIES

The McPherson (main) Library contains over 1.2 million volumes, 1.5 million items in microform, 8,000 current serials, 35,000 sound recordings, 28,000 scores, and 2000 films. The Curriculum Laboratory, which serves student teaching requirements in the Faculty of Education, has over 35,000 volumes, as well as a substantial collection of non-book materials. The Diana M. Priestly Law Library contains over 138,000 volumes and 56,000 microforms to meet the learning, teaching and research requirements in the Faculty of Law. More than 60,000 maps and 80,000 aerial photographs are accessible in the Cartographic Resource Centre.

With few exceptions, notably manuscripts, rare books, and media requiring special housing or handling, all resources are housed in open stacks. Special facilities are provided for the use of audio visual, microform, CD-ROM, and software materials. Experienced staff are available to assist students and faculty in taking fullest advantage of the Libraries' resources. Individual or group instruction is available upon request.

ACADEMIC ADVISING

Each of the undergraduate faculties provides an academic advising service for students contemplating enrollment in programs offered at the undergraduate level. The Advising Centre of the Faculty of Arts and Science is located in room A117 in the Clearihue Building. The Advising Centre of the Faculty of Education is located in room 250, MacLaurin Building. Students in the Faculty of Fine Arts are referred to the Office of the Dean of the Faculty, room 192, MacLaurin Building, for information regarding academic advice. Students in the Faculty of Engineering or Human and Social Development are referred to the individual departments or schools.

SPECIAL COURSE IN ENGLISH AS A SECOND LANGUAGE

The Department of Linguistics offers a noncredit course in English for students whose native language is not English. For details see Linguistics 099 on page 109 of the Calendar.

COMPUTING FACILITIES AT THE UNIVERSITY OF VICTORIA

The University of Victoria offers an extensive range of computing services for students and faculty members. The main computing facility is located in the Clearihue Building and includes an IBM 3090-150S, a SUN 3/280S, and a Pyramid 98Xe system. Except for scheduled maintenance periods, these systems operate throughout the year on a 7 day, 24 hour basis, to allow usage of services whenever required. Access to these systems is provided by terminals, microcomputers and workstations distributed throughout the campus utilizing broadband and Ethernet communication facilities. Also, the computers are connected to the BCnet, CA*net, CDNnet, Datapac, UUCP, NSFnet, and Internet networks, allowing access to and from systems in many other parts of the world.

Interactive and batch software services are supported on the IBM machine by the VM/SP CMS, AIX370 and MVS operating systems. Programming languages in common use include APL, C, COBOL, FORTRAN, LISP, PASCAL, PL/I, PROLOG, and SNOBOL 4. Special purpose software includes the ADABAS, BMDP, DI-3000, GDDM, KERMIT, MARKIV, MEGACALC, Minitab, NAGLIB, Natural, PROFS, SAS, SAS/GRAPH, Script, SHAZAM, SIR/DBMS, SPSS-X, TEX, and TSP packages. In addition, the IBM 3090-150S system includes a hardware vector facility which, when used together with an appropriate FORTRAN compiler and subroutine library, provides a powerful computational resource for numerically intensive programs.

The UNIX operating system is used on the SUN and Pyramid machines. Programming languages include APL, C, CPROLOG, FORTRAN, LISP, Modula-2, and PASCAL. Special purpose software includes the Ditroff, Ean, Ingres, Macsyma, Matlab, TEX, and Writer's Workbench packages.

In addition to these main facilities, Computing and Systems Services operates laboratories and classrooms equipped with IBM and Apple microcomputers and with computer terminals. Many other departments on campus have installed and operate their own systems in support of their specific activities, and these include microcomputers, SUN servers and workstations running UNIX, VAX servers and workstations using VMS, and various special purpose systems for unique applications.

A wide range of training, support and consultation services for the mainframe and microcomputer systems are offered to members of faculty and to graduate students. Further information regarding these services is available from the Computing User Services Consultant, in McPherson 067. Computing User Services also operates a Computer

Store in the University Bookstore. Apple, IBM, Microsoft, and Zenith personal computer products are available for sale to students, faculty, and staff at discounted prices.

Undergraduate and graduate students use the computing facilities to complete assignments in many different courses. Research users include faculty members from nearly all academic departments at the University. New applications in computing are continually being developed for teaching and research purposes, and a major objective of Computing & Systems Services is to provide adequate support for the computing requirements of academic programs. Computing services are also provided to the community at large, with the emphasis being placed on scientific and educational applications.

In addition, the information processing requirements of the McPherson Library, Accounting Services, and Admission and Student Records Services are supported. These and other administrative departments make regular use of computing facilities for Library administration, circulation controls, payroll, budgets, accounts payable, and student records.

STUDENT & ANCILLARY SERVICES

The Department of Student and Ancillary Services is that segment of the University which is primarily concerned on a day-to-day basis with student life and learning opportunities outside the classroom. The ultimate purpose of Student Services is to facilitate students' personal growth, organizational development, and exploration of talent and abilities in order that they may more effectively express and contribute to social milieu. The work of all personnel in the Department serves this purpose directly or indirectly.

The Department collaborates with both undergraduate and graduate student societies in assuring the accessibility of a wide variety of activities to every student. It contributes to the well-being of the student body by putting certain services at its disposal which students are encouraged to utilize while at university.

ATHLETICS AND RECREATIONAL SERVICES

The department of Athletics and Recreational Services at the University of Victoria provides a comprehensive program of sports and recreation for all students, faculty and staff at the University.

Recreation

Recreational Services provides the opportunity for you to learn a new skill and/or expand your talents through unique programming that includes: instructional classes, special events, aquatics, racquet sports, aerobics, outdoor recreation, intramural sports and employee fitness. Classes in these activities are offered each term for a nominal fee. The intramural program provides co-educational competitive and recreational activity in sports such as volleyball, basketball, soccer, softball, ice hockey, inner-tube waterpolo and flag football. Scheduling in special events includes fun runs, squash tournaments, an aerobathon and triathlons.

Athletics

The Athletics program is provided for full-time students at the University and consists of Level I and Level II Sports Programs.

The Level I program provides athletically gifted students with high quality coaching and high levels of competition that permits them to pursue their athletic abilities to the fullest while pursuing their studies at the University. Sports offered include basketball (men and women), middle distance (men and women), women's field hockey, rowing (men and women) men's rugby, men's soccer and volleyball (men and women).

The Level II program provides, to the extent that resources permit, opportunities for students to participate in selected sports with off campus teams in and around southwestern British Columbia. Level II sports include men's and women's basketball, men's and women's swimming and women's soccer.

The University of Victoria is a member of the Canadian Inter-university Athletic Union competing in the Canada West Athletic Association.

Facilities

Use of the athletics and recreational facilities or participation in the programs is open to all full-time students and to faculty and staff who have acquired a membership card at the Recreation Office. Family memberships for faculty, staff and students may also be purchased at the Recreation Office during regular business hours.

The McKinnon complex includes a large gymnasium, dance studio, apparatus gymnasium, weight training room, 25 meter L-shaped swimming pool, squash courts, fitness testing area and changing and shower facilities. There are several playing fields, a large stadium, tennis courts and miles of jogging trails through woods around the campus and along Cadboro Bay. A Sailing Compound, the Lake Cowichan Field Centre and the Elk Lake Rowing Centre are also available. Equipment for outdoor activities may be rented from the Outdoor Recreation Centre.

Student Locker Service:

Free lockers are provided for the use of students in a number of buildings on the campus. Students wishing to acquire a locker may do so on a first come first served basis by placing a lock on the selected locker. Use of such lockers is subject to University policies regarding cleaning and responsibility for damage or loss to the contents.

Gymnasium lockers may be rented annually from the Department of Physical Education, Athletics and Recreational Facilities.

BOOKSTORE

The Bookstore, located in the Campus Service Building, is owned and operated by the University and, in keeping with University policy, operates on a break even basis.

All required and recommended textbooks are stocked by the Bookstore according to faculty requests.

In addition, the general book section contains 20,000 titles in paperback and hardcover editions to provide background reading, reference material for essays and up to date reading of interest. Special orders may be placed for any book currently in print.

General Information:

Texts may be returned for refund within 5 business days of purchase. Such books must be in mint condition, unless marked as used when purchased. Students **with a receipt** may be granted a return extension for texts purchased for dropped courses until October 31 for fall/full year courses and February 28 for spring courses. A receipt must accompany each refund request.

In each term return privileges will be suspended as follows: fall/full year courses — October 31, spring courses — February 28, summer courses — July 31. May-June courses — special dates will be posted. General books, accompanied by receipt, may be returned for refund within five days from date of purchase.

Sale books and student outlines may not be returned.

Between April 15 and the first day of classes in September, and between December 1 and the last day of the week before classes begin in January, the Bookstore buys used textbooks at half the retail price according to a "want list" prepared from faculty requisitions.

The Bookstore Policy Advisory Committee, composed of faculty and student members, will be interested in any comments regarding the store.

The General Merchandise Department offers school and art supplies, gym strip, calculators, lab coats, crested ware, drugstore and gift items, magazines, musical recordings, greeting cards, stationery, games, hosiery, and sporting goods. Returns (with the exception of bathing suits) are accepted with the receipt within five days of purchase. Merchandise must be in original condition and packaging should be unbroken. Additional services are film processing and dry cleaning service and a personal computer outlet.

Sub Post Office:

A Sub Post Office is located to the right of the Bookstore entrance. Services provide postage, money orders, parcel post and registered mail.

CHAPLAINS SERVICES

Chaplains Services is pleased to make available to the University students, faculty and staff, an Interfaith Team (Christian, Buddhist, Muslim) representing a variety of religious traditions.

The office, located in the University Centre, Room A203, is open Monday to Friday, 8:30 a.m. to 4:30 p.m. Chaplains can be contacted through the office.

Chaplains services provides the following special interest programs: Marriage Preparation (GrowthTogether), Student Retreats, Sessions in Spirituality, Small Groups, Worship Services, Pastoral Counselling and Biblical, Theological and Value Studies. Check the board outside our office for up-coming events.

University Interfaith Chapel:

The University provides an Interfaith Centre for the purpose of religious celebrations and worship for all faiths. The Chapel also has a meditation room. The Chapel is open from 8:30 a.m. to 5:00 p.m. Monday to Friday while classes are in session.

COUNSELLING SERVICES

Education and Career Counselling

Many students are unsure of their educational and career goals. Some do not know what they want to major in, what careers a given major might lead to, or which careers would suit them the best. Others find it difficult to choose between several majors or possible careers and do not know how and where to find reliable information about different occupations, careers, or educational paths. Counsellors see such students individually or in groups and use various materials and tests to help them clarify their interests, abilities, needs, values, goals, and personal characteristics. Then they teach the individuals how to locate those occupations that best match them and their goals.

Counselling for Study and Learning:

It is normal for difficulties to arise in response to the more demanding and varied learning tasks required in a university. Often the strategies of learning that were successful in high school do not work very well in a university. Individual counselling is provided to assist students to develop and refine their ways of learning, as well as to manage the difficulties that arise in adjusting to university demands — difficulties such as inadequate retention, inefficient reading, exam anxiety, poor time management, procrastination, inability to concentrate, and so on. It is recommended that students enroll in one of the courses shown below in order to prevent academic problems rather than have to correct them later, when under pressure.

University Learning Skills Course — This noncredit course is offered in September and January. It is designed to help students develop better techniques for reading, for listening, for organizing and learning material, and for writing essays and exams.

Study Groups — These will be organized, on request, for particular subjects or courses. Students will be shown how to use group study to enhance learning.

Workshops — A number of workshops are offered on Time Management, Reading Efficiency, Exam Writing, Note Making, and Essay Writing (see below).

Special Learning Skills Course for New Students — This special version of the University Learning Skills course is offered in August. It helps new and mature students to cope with the transition to university learning. Contact University Extension for dates and times.

Personal Counselling:

Professional Counselling Psychologists provide a confidential atmosphere in which students can explore any topic or situation and discuss any concerns they may have. Some of the personal problems which students bring to Counselling Services are shyness, lack of self confidence, difficulty communicating with and relating to others, inability to speak up and express themselves, family and relationship conflicts, loneliness, grief, sexual concerns or abuse, depression, anxiety, stress, alcohol and drug concerns, loss of interest, difficulty in making decisions and coping with the university experience. Students are helped to work through their problems, to develop self awareness, and to overcome problems by using new coping strategies.

Group Programs:

In addition to individual counselling, counsellors offer a number of group programs. Students may arrange to join a particular group by contacting the Counselling Services.

Career Testing and Planning — To assist students in exploring career options and making realistic plans.

Class Participation/Public Speaking — To help students develop presentation, seminar skills and self confidence in the classroom.

Essay Writing — To deal with the steps in writing essays and reports with individual follow up.

Exam Writing — Highlighting tips for preparing and writing all types of exams.

Note Making — Lecture notes, study cards and SAFMEDS.

Reading Efficiency — Introduction to effective reading comprehension and remembering.

Time Management — To gain control of one's time, set goals and priorities, control procrastination and improve performance.

Assertion Training — To learn and practise standing up for rights, expressing feelings and beliefs, overcoming shyness and taking an active approach to life.

Enhancing Self Esteem — To gain a more positive picture of oneself and build self confidence.

Eating Disorders — To develop problem solving skills and healthy eating patterns.

Relaxation Training — To relax.

Stress Management — To develop strategies to reduce and prevent stress.

Migraines — To overcome or reduce migraine headaches.

Wellness Workshop — Being well.

Thesis/Dissertation Completion — To help graduate students succeed with thesis and dissertation projects through daily goal setting, performance management, and weekly meetings.

Advanced Educational Testing:

Counselling Services is authorized to administer the Scholastic Aptitude Test and Achievement Test, the Dental Aptitude Test, the Graduate Management Admission Test, the Graduate Record Examination, the Law School Admission Test, the Medical College Admission Test, the Miller Analogies Test and the Test of English as a Foreign Language.

Appointments:

Counselling Services are open and available to all students at the University of Victoria. For further information, students should telephone 721-8341, write or come to Counselling Services, located in the University Centre on the second floor, room B202.

DAY CARE CENTRES

Three cooperative day care centres for students, staff or faculty with pre-school-age children are located on the campus. These centres are licensed to take children between the ages of 18 months and five years. A fourth centre located in Hut W is licensed to provide care for children aged 6-12 years in an after school and school closure program. The Provincial government pays subsidies, based on income, toward the fees of these nonprofit centres which are staffed by trained personnel. If a student is not eligible for government subsidy or when the subsidy does not cover day care costs, the student is then advised to contact the University Student Financial Aid Office on campus if the student cannot meet day care expenses. Registration is limited. Application should be made several months in advance of the date day care services are required. Inquiries and applications should be made to the Coordinator, Day Care Services (721-8500).

FOOD SERVICES

The University operates a comprehensive food service facility in the Cadboro Commons Building. The Coffee Gardens, including a Salad and Potato Bar, and the Raven's Wing and Pizzeria, are located on the main floor of the building to provide meals and snacks to all members of the University community. The Gold Room, located on the second floor, features an extensive hot and cold luncheon buffet. Residents'

meals are served in the Cadboro Commons Dining Room located on the second floor of the building. A full residence food program is provided on an a la carte plan. A similar meal plan designed for economy, flexibility and convenience, is available for nonresident students. Additional cafeteria and dining facilities are located in the University Centre and in the Begbie Building. Supplementary food service is provided by banks of vending machines in the MacLaurin and Elliott Buildings, and by individual machines located throughout the campus. The Department of Food Services provides catering for all occasions and for both on campus and off campus groups. For further information contact Food Services general office, room 140, Cadboro Commons Block or call 721-8433.

HEALTH SERVICES

The Health Services Building is located at the South East corner of Parking Lot No. 5.

Hours are 8:30 a.m. - 4:30 p.m., Monday to Friday except Thurs. 9:30 a.m.

In addition to the medical services required in direct support of various university activities and programs, the Health Services offers general medical treatment, health counselling, nutritional consultations, physiotherapy, dermatology, gynecology, sports medicine clinics and psychiatric services for the benefit of students. While these services may be utilized by any student, they are offered primarily for the convenience of those students who do not have a regular physician in the Victoria area. Students are responsible for the cost of any such medical services provided, and students not having valid insurance coverage will be billed directly.

All students are required to have medical insurance. Details regarding medical and hospital insurance coverage are available from the Health Services. Inquiries regarding the Students Extended Benefits Plan should be directed to the UVSS in the Student Union Building.

Even though there is the supplemental extended health benefit plan provided by the Student Society, students still require primary coverage.

Physiotherapy Services

Treatment by a physiotherapist can be undertaken only after presentation of a written referral from a physician. Physiotherapy treatments can be billed directly to Medical Services Plan of B.C. or Alberta Health Care. Students with coverage under plans other than these will be billed directly.

British Columbia Residents

British Columbia students are encouraged to join the Medical Services Plan of B.C.

Residents of Other Provinces

Students from other Provinces are encouraged to continue their Provincial Medical coverage and are to be prepared to produce a medical insurance identification number. All Canadian provincial plans and those of the Yukon and Northwest territories are acceptable to University Health Services but may not be acceptable to private physicians' offices, hospital, laboratories, etc. If you have any other plan the University will bill you and you may then be reimbursed by your medical plan. Please carry your medical insurance number with you when you visit Health Services.

Nonresidents of Canada

Students who are not residents of Canada are required to purchase sickness and hospital insurance coverage through the University of Victoria as a condition of registration. The fees for insurance coverage will be assessed automatically in the first term along with tuition and other university fees. This insurance coverage is for a period of three months, which is the waiting period until a non-resident is eligible for B.C. Medical Plan coverage. The rates for insurance coverage are as follows: (a) for all undergraduates and graduate students up to age 30: $121.00; (b) for graduate students over age 30: $218.00. These rates are subject to yearly change. Students who can supply evidence of comparable existing coverage may receive a waiver of this assessment. Students who wish to expand this coverage to include a spouse or other members of the family may do so upon application to the University of Victoria. The current rates for coverage for undergraduate and graduate students up to age 30 are $241.00 for a couple, and $273.00 for a family. For graduate students over age 30 the rates are $434.00 for a couple, and $520.00 for a family. Students wishing to apply for expanded coverage or refund may do so by completing appropriate forms at Health Services.

Illness Involving Examinations

Students are referred to the academic regulations governing illness at the time of examination, found on page 17.

HOUSING AND CONFERENCE SERVICES

University Residence Accommodation:

The University offers single and double (shared) room accommodation for 1200 students in four residence complexes: Craigdarroch, Gordon Head, Lansdowne and McGill Residences.

A number of living style options are available. Applicants may request to live in single sex or coeducational areas and may choose an environment which has an academic/social balance or an academic emphasis. There are also areas set aside for senior and graduate students.

There are various Residence programs offered which encompass academic, recreational, social and personal development. Past programs have included such items as study skills workshops, ski trips, mystery dinner theatre, and assertiveness training.

Residence students take their meals in the Cadboro Commons, centrally located near all of the residence complexes. An 'a la Carte' meal plan is offered which allows students maximum flexibility in food choice and control over their food budget.

Application Procedure

Write to Housing Services prior to February 1, 1991 to receive an application. Immediately return the completed application form with a $20 payment. **Do not wait until admitted to the University to complete this procedure as applications are numbered upon receipt, thus establishing the order in which an assignment will be made.** Typically, there are far more applications received than there are rooms available. Commencing February 1, 1991, applications will be accepted at the Housing Services office.

Admission to the University does not guarantee a place in Residence. Room assignments begin in April and continue through September. Every effort is made to meet stated preferences; however, limited availability may restrict what can be offered at a given time.

Waiting List

Because the number of applications far exceeds the number of available rooms, a wait list is compiled each year. As vacancies occur, assignments are made from this ordered list. From May-August, students on the wait list are urged to call 721-8404 for up to date wait list information. The wait list is used year round to fill vacancies as they occur during the Winter Session. Students remaining on this list in September are urged to check in at the Housing office weekly to update their applications and to indicate their continued interest in obtaining a Residence room.

Payment Procedure

Residence fees for 1990-1991 for an average eater were:

Single room: **$3802** Double (shared) room: **$3372**

Payment of fees is usually made in two installments. First term fees are due by August 1, 1991. Second term fees are due by December 1, 1991. The original $100 payment made at the time of application is credited to second term fees. Failure to meet any payment deadline results in the cancellation of the room assignment and forfeiture of the $100 deposit.

Moving In

Students who have been assigned residence accommodation may occupy their rooms on Monday, September 2, 1991. The residence meal pass becomes effective for breakfast on Tuesday, September 3. Residence accommodation is available prior to September 2, but students are charged the Conference Student rate for each additional day of occupancy. Students who are unable to occupy assigned accommodation by September 4, the first day of lectures, must notify Housing Services in writing before that date, otherwise the assignment will be cancelled.

Withdrawals

A student wishing to withdraw from residence is required to give one month's notice. Further inquiries can be made in writing to the Housing Services office or by telephone at (604) 721-8395.

Summer Housing

Residence accommodation is available throughout the summer months (May-August) for students, families and friends. Students are encouraged to spend a few days on campus prior to the September opening to familiarize themselves with campus, explore the Victoria area and find off campus housing if they are not staying in residence for the academic year. Reservations are recommended for this 'bed and breakfast' service. Contact Housing Services at (604) 721-8396 for rates and further details.

OFF CAMPUS HOUSING REGISTRY

The Housing office maintains a registry of off campus accommodation. Types of accommodation include rooms, rooms and meals, suites, shared accommodation, houses, and apartments. Due to the rapid turnover of these accommodations, lists are not mailed out; they are available for viewing in the Housing office. It should be noted that the number of listings peak in early August. Students with families may also find this registry useful. For more information telephone (604) 721-8397.

STUDENT EMPLOYMENT

The Canada Employment Centre on campus is the Student Placement Office for the University of Victoria. It is operated by the Canada Employment and Immigration Commission in cooperation with the University as a service to students.

The main functions are:

providing career information and employment counselling;
posting information about career employment opportunities;
posting part time, casual and summer employment opportunities;
arranging interviews with employers recruiting on campus;
providing group and individual sessions in resume writing and job interview preparation.

Final year students and recent graduates should be aware that many public and private employers begin recruiting in September, with application deadlines in October. Final year students seeking permanent employment should become frequent visitors of the Student Employment Centre, starting in late September.

A variety of summer job opportunities are also posted as early as September, often with application deadlines in October and early November.

All part time and casual job vacancies are posted as received. Students interested in those opportunities are advised to visit the Centre frequently.

Help and guidance in writing resumes, job applications and handling interviews is available in group and individual sessions. The Centre is open Monday - Friday from 8:30 a.m. to 4:30 p.m.

A variety of student employment information is also displayed on notice boards in Elliott (study wing), MacLaurin,Clearihue (main floor, A wing), Cunningham, Cornett and the Student Union Building.

STUDENT FINANCIAL AID SERVICES

The University operates a Financial Aid services office, located on the second floor of the University Centre, which is open during regular University hours (8:30 a.m. to 4:30 p.m.). Monday through Friday. Students wishing to discuss their financial situation are advised to arrange for an appointment by calling the office at 721-8423, well before they require assistance. A trained staff of financial advisers is available to discuss and advise prospective students about the costs of attending and the potential sources of funds to cover these costs.

Students must take into consideration tuition, books and supplies, food and accommodation, transportation, and day to day living expenses when considering attending a Winter Session at the University of Victoria. A booklet entitled "Information and Guide to Application" which accompanies the application form for B.C. Student Assistance Program contains a breakdown of costs allowed by the Government for the average student and is helpful in preparing a budget. The booklet, along with application forms and appendices, is available in a kit from the Student Financial Aid Services office. In addition, more specific information is available in several sections on financial aid at the back of this calendar.

If financial assistance is needed to attend, students should know that the following costs were approved by Federal and Provincial student aid agencies for the 1990-91 Academic Year.

Tuition and Student Government Fees

In 1990-91, the tuition and UVSS fees for a student enrolled in 15 units were $1747 but these fees will vary according to the course load taken and are different for students in Law and Graduate Studies. For specific course costs, consult the preceding section on fees.

Books and Supplies:

Books and supply costs were allowed at $80 per 3 unit course in Arts and $100 per 3 unit course in Science during 1990-91. Students enrolled in courses such as Law, Visual Arts, Music and Theatre may face additional expenses for materials and instruments.

Food and Accommodation:

In 1990-91, a single student living away from home (that is, living off campus) was allowed a maximum of $4760 for food and accommodation or approximately $595 per month.

Single students planning to live on campus can refer to the rate schedule listed earlier in this section under Housing and Conference Services.

Costs for married students and single parents will vary greatly according to their accommodation and the number and age of their children. The booklet for the B.C. Students Assistance Program referred to earlier is particularly helpful in this regard in a section entitled "Calculating Need for Married Students and Single Parents".

Transportation:

Local transportation to and from classes was allowed at the rate of $12.50 per week during 1990-91. Students commuting great distances may request additional costs if justified. Students from outside the Victoria area should include the cost of two return trips between their home and the University by the most economical means when proposing their budget for student financial aid.

Miscellaneous and Exceptional Expenses:

Students will incur a number of day to day expenses for items such as clothing, laundry, prescription drugs, recreation and entertainment. In addition, some students will have exceptional expenses, either course related (practica, field trips, etc.) or personal (chronic medical problems, support to family, etc.) These expenses should be included in the budget estimates. Students applying for B.C. Student Assistance Program should be sure to provide documentation with respect to any exceptional expense claimed, including B.C. Medical payments. Miscellaneous expenses were allowed at the rate of $28 per week during 1990-91.

For further details on costs allowed, please read the guide accompanying the B.C. Student Assistance Program carefully.

SPECIAL STUDENT SERVICES

The Associate Director of Student and Ancillary Services acts as adviser to special student populations. Foreign students, native students and disabled students are advised to contact the Associate Director in Room B215 of the University Centre (721-8024) regarding issues affecting their ability to successfully participate in university life.

Disabled Student Services

The university maintains a limited inventory of adaptive equipment for the blind and hearing impaired students. The Disabled Resource Centre in the McPherson Library is equipped with three computers with speech synthesizers, a large print monitor and an Arkenstone reading computer. There are two portable FM systems available for loan to hearing impaired students. Students with concerns regarding testing or other accommodations should see the Associate Director of Student Services.

Foreign Student Services

Students from foreign countries are able to participate in the Host Family Program where arrangements are made with local volunteers to assist foreign students become familiar with the campus and the city of Victoria. The Foreign Student Handbook is a guide mailed to all new visa students to assist them with the transition to Canada. Foreign students are encouraged to make plans well in advance, pay close attention to immigration regulations and follow the procedure for health insurance.

Native Student Services

Native students are encouraged to drop in to the Native Student Union office in MacLaurin A323. The Native Student Union offers a mutual support network to help new students with orientation to the campus and community. Students with general concerns are encouraged to contact the Associate Director of Student Services.

CAREER INFORMATION VOCATIONAL COUNSELLING

Career information and vocational counselling may be obtained from the Counselling Services or the Canada Employment Centre on campus which operates a Careers Information Room. Students may also wish to contact faculty advisers in their areas of study for advice pertinent to career planning.

STUDENT AFFAIRS

The Director of Student and Ancillary Services serves as the liaison between Student Societies and the University.

UNIVERSITY OF VICTORIA STUDENTS' UNION (UVIC Student's Society)

All undergraduate students on campus at the University of Victoria are members of the Students' Union (UVSS) which functions as the recognized means of communication between the general student membership, the administration, and the community.

The affairs of the UVic Students' Union are directed by fifteen students, who are democratically elected in March, for one year terms. Four of the directors perform executive functions: the President, Vice President Finance, Vice President Services and the Vice President Academic. Issues affecting student life, such as housing, fees, employment, and postsecondary funding are promoted by the Board of Directors which meets regularly during the Winter Session.

The Student's Union is headquartered in the Student Union Building, where students operate a wide range of services and programs. Operations include three food service outlets, the S.U.B. Pub, Cinecentra Films, the Martlet student newspaper, CFUV Radio, the Graphics Shop, and a Campus Used Bookstore (C.U.B.). The office of the Ombudsperson is located in the S.U.B. Through their Students' Union, students sponsor and participate in clubs, course unions, and publications such as the Student Handbook, and the Telephone Directory. Dances, concerts, speakers and seminars are regular activities which take place in the S.U.B.

The President of the Students' Union is always available to help students get involved and is eager to voice the concerns of students at every tier of government. As a member of the Canadian Federation of Students, students have representation at the local, provincial and national levels of government. Thus, being an active member of the UVic Students' Union is one of the most important ways of contributing to the future. By participating in the decision making process—whether it be by casting a ballot at election time, or by running for a position on the Board of Directors, Senate, or Board of Governors—students enrich themselves and the entire university environment.

Participation is invited and encouraged.

President 1991-92: Oona Padgham

Office of the Ombudsperson, UVSS:

Operating out of Room 133 of the Student Union Building, the Ombudsperson functions as an independent, impartial investigator equipped to field student complaints about any department or office on campus. While the office is not empowered to enforce its recommendations, it seeks to ensure that on campus decisions and University regulations are both fair and equitable. The office also acts as an information and referral centre about and to campus operations and services.

All contacts with the Ombudsperson's office are confidential.

The Ombudsperson can be reached at 721-8357 or messages can be left at the UVSS general office. Office hours are advertised in the Martlet and posted at various locations around campus.

B.C. PIRG:

The UVSS Activity Fee also supports the B.C. Public Interest Research Group, located in the S.U.B. B.C. PIRG engages in student research in topical areas under the direction of its provincial and local boards. Student proposals for research are welcomed and financial assistance with projects is available for supply expenses.

GRADUATE STUDENTS' SOCIETY

The Graduate Students' Society was officially recognized by the Senate of the University of Victoria in the fall of 1966, shortly after the establishment of graduate studies. Through the Executive Council of the Society, it represents the graduate students to the University and the community.

The seven members of the Executive of the Society are elected for one year terms by the members of the Society. Executive members may be elected in October or April. Any graduate student registered at the University of Victoria, whether part time or full time, is eligible (a) to vote in Society elections; (b) to hold office in the Executive Council; (c) to represent the Society on University and Senate committees, and (d) to be elected by the graduate students in their department to act as a liaison between the Executive Council and the graduate students in that department.

The Functions of this Society are: (a) to represent the graduate student body in all matters pertaining to the welfare of it as a unit or any of the individuals comprising that body, (b) to represent the academic, teaching and research assistants in communication with the faculty and administration, (c) to act as a liaison between the graduate student body and the faculty and administration, (d) to promote intellectual, social and recreational activities among graduate students, and (e) to provide a communication link with the UVIC Students' Society of the University and with graduate students from other universities.

The Society is funded by fees collected at registration by the University for the Society (see page 21). These funds are used to pay the costs of preparing Library/G.S.S. identification cards for graduate students as well as to support the regular functions of the Society, the building fund and athletics and recreation.

Graduate students with ideas, projects or problems are urged to contact any member of the Executive for assistance. Executive members may be contacted through the Faculty of Graduate Studies or directly in the G.S.S. office, Room 146 in the S.U.B. After Spring 1991, the G.S.S. will be located in the George and Ida Halpern Graduate Student Centre, located at the corner of Sinclair and Finnerty Roads.

The Graduate Students' Society in collaboration with the Faculty of Graduate Studies administers a fund to assist graduate students wishing to attend professional meetings and conferences. For information, contact the Faculty of Graduate Studies at 721-7970.

President 1990-91: Douglas Tolson
G.S.S. office phone no.: (721-8816)

GENERAL CONDUCT

The University authorities do not assume responsibilities which naturally rest with parents. This being so, it is policy to rely on the good sense of students for the preservation of good moral standards and for appropriate modes of behaviour and dress.

HAZING

The University prohibits hazing.

The attention of students is called to this resolution of the Alma Mater Society:

The Student's Council shares the concern of the University over hazing during Frosh Week. We wish to point out that any form of hazing is forbidden by University regulation. With the advent of residences and the ensuing growth of the University, this form of conduct has become archaic and will no longer be tolerated. Any behaviour which exceeds

the bounds of good taste and common sense will result in disciplinary action by the Student's Council.

CANADIAN FORCES SUBSIDIZATION PLANS

The Canadian Forces provide a unique opportunity for young Canadians to obtain a baccalaureate degree while training for the varied and rewarding career of a Military Officer, through a program called the Regular Officer Training Plan (ROTP).

This plan provides for university subsidization for up to 5 years, in programs leading to undergraduate degrees in Engineering, Sciences, Arts or Administration. Specialist degrees in Physiotherapy, Pharmacy, and Nursing are also subsidized. Medicine and Dentistry are subsidized under separate plans called MOTP and DOTP respectively.

On graduation, the individual receives a commission and commences a career as an officer with the Canadian Forces.

For more information contact:
ROTP OFFICER
CANADIAN FORCES RECRUITING CENTRE DETACHMENT
721 Johnson Street
Victoria, B.C.
V8W 1M8
Tel. (604) 363-3717

ALUMNI ASSOCIATION

The Alumni Association is an organization composed primarily of University of Victoria graduates. It seeks to support the University and to represent the views of graduates within the University community. In addition to graduates, automatic members of the Association by virtue of their being on the Convocation Roll include: the Chancellor, the President and Vice-Chancellor of the University, members of the Board of Governors and the Senate, all Faculty members, some members of Victoria College as well as others on the roll, such as emeritus Faculty, some University employees and members of the community.

The Association is governed by an Executive elected and appointed annually.

Programs for alumni are implemented jointly with the Development & Alumni Relations Office. Alumni programs include the sponsorship of scholarships, bursaries and an award for excellence in teaching, as well as reunions, social activities and a travel program.

The Association membership is informed of activities through mailings and through the University of Victoria alumni magazine, 'the Torch.'

The Alumni Association can be contacted through the Development & Alumni Relations Office on campus. Telephone number: 721-7635.

President 1991-92: Wendy Gedney

UNIVERSITY PUBLICATIONS

Besides this Calendar and the publications mentioned on the inside front cover, the following are designated as authorized University publications:

Malahat Review

An international quarterly of life and letters edited by Constance M. Rooke, B.A., M.A., Ph.D. Subscription: $15.00 for one year; $40.00 for three years (overseas, $20.00 and $50.00, respectively).

The Ring

A news tabloid published biweekly and edited by Donna Danylchuk. Circulated on campus free of charge.

Canadian Bilingual Dictionary Project:

The University is currently preparing a revised and enlarged edition of *The Canadian Dictionary/Dictionnaire Canadien*, published in 1962. Project Director: Professor H.J. Warkentyne, Department of Linguistics.

DIVISION OF UNIVERSITY EXTENSION AND COMMUNITY RELATIONS

The purpose of the Division is to work with all faculties to plan and offer programs described below.

Credit Courses and Programs Offered Off Campus, Evening Credit Courses Offered On Campus and Courses Offered in the Summer Studies Period.

The announcement of the courses to be offered on and off campus in the Summer Studies period will be issued in February. Information about on campus evening courses and off campus courses starting in September, will be available in June. Contact the Division of University Extension and Community Relations, and/or Admission Services or Records Services at the University.

Academic rules and regulations published in this Calendar, except as described in any Program Supplement to the Calendar, apply to students taking courses under this section.

The University reserves the right to cancel courses when enrollment is not sufficient and to establish special regulations for admission to nondegree programs or courses.

Selection of courses must be made in keeping with Calendar prescriptions for the degree program involved. Students seeking academic advice regarding degree programs should consult the appropriate academic advising centre. Inquiries should be directed to one of the following:

Advising Centre—Faculty of Arts and Science, Room A117, Clearihue Building. Telephone: 721-7566.

Advising Centre—Faculty of Education, Room 250, MacLaurin Building. Telephone: 721-7877.

Students in the Faculty of Fine Arts or the Faculty of Human and Social Development should contact the specific department or school.

Regulations governing application and registration procedures and fees are detailed in the appropriate Supplement.

Professional Development Programs:

These programs are planned to meet the specific continuing education needs of persons working in the professions. Courses and workshops are offered throughout the Province in cooperation with regional colleges and professional organizations. Programs for professionals leading to certificates or diplomas are offered in the following areas: Business Administration, Computer Based Information Systems, Cultural Resource Management, Fine Arts, French Language, Humanities, Public Sector Management, Technology and Management.

Distance Education:

In collaboration with various faculties, University Extension and Community Relations offers credit courses, professional development and community education programs which permit students throughout the province to study on a part time basis. Programs use a variety of instructional delivery methods including Knowledge Network television broadcasts, video tapes, audio cassettes, computer assisted instruction, audio conferencing, print and face to face instruction. Regular telephone contact with the instructor is an important component of all distance education courses. The University of Victoria's distance education offerings are supported financially by the Open Learning Agency and are listed in the Extension Credit Guide. The other partners in this

system include Simon Fraser University, The University of British Columbia and the Open University.

Community Education Programs:

The nondegree program utilizes a variety of educational formats, such as courses, lecture series, workshops, conferences, residential seminars, and symposia. The curriculum is developed in cooperation with departments from all faculties of the University.

Areas include: Programs for Women; Seniors; Arts and Science; Education; Business and Management; Learning and Life Skills; Travel Study; Adult Education; Fine Arts; Health Sciences; Languages. Additional courses are developed as needs arise and academic resources permit. Also, a number of programs under SAGE (Stimulate, Advance and Guide Education) focus on peer learning and peer teaching and use study groups as an alternative format for delivery.

Conference Office:

The Conference Office offers a conference planning and management service to assist University and nonacademic groups and organizations with the preparation, management and evaluation of meetings, seminars and conferences, both on and off campus.

For further information on any of the above programs please call or write the Division of University Extension and Community Relations, University of Victoria, P.O. Box 3030, Victoria, B.C. V8W 3N6. Telephone 721-8451.

PREPROFESSIONAL EDUCATION

The material which follows is only *a guide* to professional education at other institutions, and students must not assume that completion of these courses will grant them automatic admission. Students who are seeking advice about professional education should consult the Arts and Science Advising Centre, University of Victoria, where specific information on prerequisites may be obtained. Students who plan to undertake professional studies at other Canadian or American institutions are urged to correspond with the institutions of their choice prior to their first year at the University of Victoria.

Please note that course programs for First Year students only are outlined, although it may be possible to complete one or more additional years of study at the University of Victoria.

AGRICULTURE

Suggested courses:
Biology
Chemistry
English
Mathematics
Physics or Economics

ARCHITECTURE

Suggested courses:
Art
English
Mathematics
History in Art
Physics
Social Sciences

APPLIED SCIENCE

Suggested courses:
Chemistry
English
Mathematics
Physics
Elective

CHIROPRACTIC

Suggested courses:
Completion of two years in Arts and Science, the first year of which to include the following:
Biology
Chemistry
Mathematics
Physics
Psychology

COMMERCE AND BUSINESS ADMINISTRATION

Suggested courses: First Year Arts and Science or its equivalent with standing in 15 units (including Economics, English and Mathematics).

DENTISTRY

Completion of at least three years of study on a degree program in Arts and Science including Biology, Chemistry, English, Mathematics, Physics, Biochemistry.

FORESTRY

Suggested courses:
Biology
Chemistry
English
Mathematics
Physics

FAMILY AND NUTRITIONAL SCIENCES

Suggested courses:
Biology
Chemistry
English
Mathematics (Hum. Nutri., Dietetics)
Physics (Human Nutrition)
Social Science (Family Sciences, Home Economics)

MEDICINE

Completion of at least three years of study on a degree program in Arts and Science including:
Biology
Chemistry
English
Mathematics
Physics
Biochemistry

OPTOMETRY

Completion of two years in Arts and Science, the first year of which to include the following:
Biology
Chemistry
Mathematics
Physics
Psychology

PHARMACY

Suggested courses:
Biology
Chemistry
English
Mathematics
Physics

REHABILITATION MEDICINE

Suggested courses:
Biology
Chemistry
English
Mathematics
Psychology

SPEECH AND HEARING SCIENCE

Students intending to pursue studies in the Speech and Hearing Sciences after graduation are advised to consult the Department of Linguistics about the Bachelor of Science in Linguistics, which offers suitable preparation for this area of study.

VETERINARY MEDICINE

Completion of two years in Arts and Science including:
Biology, including Genetics
Chemistry, including Organic Chemistry
English
Mathematics
Physics
Biochemistry
Microbiology
Electives: a course in Statistics is recommended and may be applied towards the mathematics requirement.

LIBERAL STUDIES

The University of Victoria, in cooperation with Malaspina College, offers a Bachelor of Arts degree in Liberal Studies at Malaspina College. The program, which is a full-time two-year program offered on the campus of Malaspina College at Nanaimo, B.C., is open to students who have completed two full years of university study. It consists of a multidisciplinary core program — an integrated format of lectures, seminars, tutorials and other activities equivalent to three courses, in each of the four terms — plus electives in traditional disciplines. The objective of Liberal Studies is to provide a sound general education as an alternative to programs based on one or two disciplines; the program aims to provide a strong foundation in the basic intellectual skills and a broad background in the arts and sciences. For a full description of the program, information on admission, and other details, please see the Malaspina College Calendar.

FILM STUDIES

Although the University does not presently offer a major in film studies, there is a wide variety of courses taught on the campus dealing with the subject of film. Students interested in film and wishing to develop their knowledge of this subject may take some or all of the following courses: ENGL 405, 414, 415, FREN 483, GER 433, ITAL 485, RUSS 304, SPAN 485, (Faculty of Arts and Science); ED-B 463 (Faculty of Education); CW 312, HA 295, 363, 365, 366, 367 (Faculty of Fine Arts).

COOPERATIVE EDUCATION PROGRAMS

THE "COOPERATIVE" CONCEPT

Cooperative Education can be described as a process of education which formally integrates the students' academic and career studies on campus with relevant and productive work experience in industry, business, and government.

The accumulation of up to two years of varied and program related work experience enhances the students' intellectual, professional, and personal development, by providing opportunities for applying academic theories and knowledge, evaluating and adjusting career directions, and developing confidence and skills in working with people.

COOPERATIVE EDUCATION PROGRAMS OFFERED

Cooperative Education Programs are currently offered in the Faculty of Arts and Science (Biology, Biochemistry and Microbiology, Business, Chemistry, Computer Science, Geography, Mathematics, Physics), the Faculty of Education: (School of Physical Education: Leisure Studies Major, Human Performance Major), the Faculty of Engineering (Computer Engineering, Computer Science, Electrical Engineering, Mechanical Engineering), the Faculty of Fine Arts (Creative Writing), the Faculty of Human and Social Development (Health Information Science), the Faculty of Graduate Studies (Economics, Public Administration, and other graduate areas on an individually negotiated basis) and the Faculty of Law. An Arts Cooperative Education Program is available to students in selected Humanities and Fine Arts programs. See entries under Faculty of Arts and Science and Faculty of Fine Arts.

ADMISSION

Admission and graduation requirements for Cooperative Education Programs are determined by the individual departments. Consult the calendar entries in these areas for further information.

Students must apply to the appropriate department for admission to the Coop Program. In general, Coop students are required to achieve an above-average academic standing, and to demonstrate the motivation and potential to pursue a professional career.

WORK TERMS

As an integral component of Cooperative Education Programs, students are employed for a number of work terms, which are arranged and evaluated by the individual departments. For undergraduate programs, the minimum number of work terms is 50% of the required number of academic terms (individual departments may require more).

Work terms, normally of four months duration (13 weeks minimum), begin in January, May, and September. Work terms generally alternate with full time academic terms on campus, and provide productive and paid, full time work experience which is related to the student's program of studies and individual interests.

WORK TERM CREDIT BY CHALLENGE

Certain Coop Programs allow students to challenge their first work term on the basis of prior, relevant work experience. Students should discuss any potential challenge with the Coop Coordinator for their program. Not all programs permit Work Term Challenge; where it is permitted, it is subject to the following regulations.

1. A formal application to challenge a work term is required prior to undertaking the first scheduled work term.
2. Application forms for Work Term Challenge may be obtained from the Records Office, and must be submitted to the appropriate Coop Program for approval to challenge, after which the Challenge fee is assessed.
3. Work term credit by Challenge is limited to a maximum of one work term; exceptions require the approval of the Director of Cooperative Education Programs.
4. Assessment of Work Term Challenge will be carried out by the appropriate Coop Program, based on the following:
   (a) a minimum of one year of continuous, directly relevant work experience;
   (b) written confirmation of employment and evaluation of performance from the employer;
   (c) comprehensive outline by the student of the prior work experience, providing evidence that the student has acquired appropriate professional and personal knowledge and skills;
   (d) A work report appropriate to the discipline.
5. Once the assessment has been administered, the result will be entered on the student's academic record.

GENERAL REGULATIONS

1. Students must register for each work term by completing the Work Term Registration form, which is provided by the Coop Coordinator and which is normally completed when the student accepts an offer of work term employment and must be completed prior to start date. Once registered, students are not permitted to withdraw from the work term without penalty of failure, unless specific written permission has been granted by the department. Students must contact the appropriate Coordinator for recommendation on procedure.
2. Each work term is evaluated on the basis of the student's performance of assigned work term tasks and a written work term report. The work term period and evaluation (grading: COM, F, or N) are recorded on the student's official academic record, as well as on the official Record of Work Terms, which is attached to the academic record and which also includes work term details (employer, title of report, and position title). A failing grade (F or N) will be assigned if a student fails to complete satisfactorily the requirements for the work term; the requirements include satisfactory performance on the work term and the submission of a satisfactory work term report by the deadline specified by the individual department.
3. A failed work term will normally result in the student being required to withdraw from the Coop Program, subject to review by the department.
4. A Coop Program fee, which is nonrefundable, is due in the first month of each work term and is subject to the Fees regulations (p. 19.).
5. In the undergraduate programs, students are required to complete satisfactorily at least four required work terms (individual departments may require more; Law requires three). After admission to the program, students are required to register for all scheduled work terms, except for the work term offered by some programs in the summer at the end of first year.
6. Work term reports are normally due during the first month following each work term, at a time established by the department, for evaluation as part of the assessment of the work term.
7. In the event of a work stoppage within the first nine weeks of a work term, an attempt will be made to arrange an alternative work placement, to enable the student to complete the work term. If the work stoppage occurs after nine weeks, the work term will be accepted for credit providing all other work term requirements are met.
8. The transferability of work terms from other institutions which offer Coop programs is determined by individual Coop departments on the merits of each completed work term. The number of work terms accepted for transfer must be less than 50% of the total number required for completion of the Coop Program.
9. Students who are taking double or combined major degrees (where each area offers a Coop program) may, if eligible, enroll in and undertake work terms in both Coop programs. Students who complete at least two work terms in each area will have the combined nature of their program noted as part of the Coop designation on their official records.
10. To graduate from a Cooperative Education Program, students must complete satisfactorily the minimum number of work terms and maintain the academic standing required by individual departments. Students who elect to graduate before the completion of a work term will not have that work term count toward their degree program; if

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FILM STUDIES

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this is a required work term, they will not graduate with the Coop designation.

11. Students registered for work terms are considered to be enrolled in a full time course of studies and may not take university level credit courses without the permission of the appropriate department. Work term students who wish to enroll in a course should contact their Coop Coordinator.
12. Students enrolled in Coop programs may be allowed to complete a 3 unit course commencing in September over a 16 or 20 month period, provided the department concerned consents. Students must obtain written permission from the department involved when registering in the course. In such cases, a temporary grade of CIC (Coop Interrupted Course) will be entered into the student's December transcript. The CIC grade is used only when a 3 unit course is interrupted by a work term. Unless there is formal withdrawal from the course, the temporary CIC grade will be changed to N (a failing grade) if the course is not completed within 20 months.

FACULTY OF ARTS AND SCIENCE

Louis D. Costa, A.B. (C.C.N.Y.), M.A., Ph.D. (Col.), Dean of the Faculty and Dean of Social Sciences
Edward I. Berry, A.B. (Wesleyan), M.A., Ph.D. (Calif., Berk.), Dean of Humanities
Alastair T. Matheson, B.A., M.Sc. (Brit. Col.), Ph.D. (Tor.), F.R.S.C., Dean of Science
M. Elizabeth Watton, B.Sc., M.Sc. (McM.), Administrative Officer
Frank P. Robinson, A.B. (Fisk), Ph.D. (Alta.), Assistant Dean and Director of Academic Advising
Garry R. Charlton, B.A. (U. of Vic.), Advising Officer
Marjorie L. Menhenett, B.A. (Wellesley Coll.), M.A. (Calif. Berk.), Advising Officer
Gillian M. Chamberlin, B.A. (U. of Vic.), Advising Assistant
John G. Fitch, B.A., M.A. (Cantab.), Cert. Ed. (Leeds), Ph.D. (Corn.), Acting Academic Director, Language Centre
Peter G. Liddell, M.A. (Edin.), Ph.D. (Brit. Col.), Academic Director, Language Centre
Reidun Anderssen, Senior Academic Assistant, Language Centre
Mavor Moore, B.A. (Tor.), D.Litt. (York), Research Professor in Humanities

DEGREES AND DIPLOMAS OFFERED

The degrees offered in this Faculty are Bachelor of Arts (B.A.), Bachelor of Commerce (B.Comm.), Bachelor of Science (B.Sc.). The diplomas offered are Diploma in Applied Linguistics and Diploma in Humanities.

ACADEMIC ADVICE

Academic Advising Centre: Academic advice for the Faculty of Arts and Science is available through the Arts and Science Advising Centre, A117 Clearihue Building. Students seeking information or advice regarding programs, courses, or University and Faculty regulations are invited to visit the Centre, or write to the Director. Appointments with an Adviser may be made by telephoning 721-7567.

Departmental Advising: All academic departments have Advisers generally available throughout the Winter Session who can give detailed information regarding courses and programs within each discipline. Students wishing advice from departmental advisers during the summer months should write or telephone the department for an appointment. Students transferring into the Faculty of Arts and Science from a professional program should consult the department in whose discipline they plan to Major regarding their previous credit.

Faculty of Education Advising: Students in the Faculty of Arts and Science who wish to enter the Faculty of Education at a later date are advised to consult the Education Advising Centre, Room 250, MacLaurin Building, before they begin their studies in Arts and Science.

Faculty of Engineering Advising: Students in the Faculty of Arts and Science who wish to enter the Faculty of Engineering at a later date are advised to consult the Computer Science Coop Advising Office, Room D-257, Clearihue Building, before they begin their studies in Arts and Science.

PROGRAM PLANNING

It is recommended that all students discuss their proposed programs with the Arts and Science Advising Centre and/or with Departmental Advisers well in advance of registration.

Students who may wish to transfer to another university to complete their degree are advised also to consult the university of their choice regarding required courses and transfer equivalencies.

Record of Degree Program: All students in the Faculty of Arts and Science are required to declare a degree program by completing a Record of Degree Program form in consultation with the Arts and Science Advising Centre, preferably near the beginning of their third year of studies, and, in any event, not later than the second term of that year. The purpose of this form is to ensure that proposed courses will meet the requirements for the degree program selected. A copy of the form is placed on file in the Records Office to be used as a record for graduating purposes.

Limitation of Enrollment: In certain programs of study, it may not be possible to accommodate all those seeking entry. Consequently, even though applicants may be admissible to the University, the Faculty of Arts and Science may not find it possible to allow the students entry into the program of their first choice. In addition to enrollment limitations, it may be necessary to limit registration in individual courses.

REQUIREMENTS COMMON TO ALL BACHELOR'S DEGREES IN ARTS AND SCIENCE

Each candidate for a bachelor's degree is required:

(a) to have satisfied the University English Requirement (see page 13);
(b) to include in the first 15 units presented for the degree not more than 9 units from any single department, and at least 3 units from each of two other departments;
(c) to include in the next 15 units presented for the degree not more than 12 units from any single department, and at least 3 units from one other department;
(d) to include in the remaining units presented for the degree at least 21 units of courses numbered at the 300 or 400 level (this is a general University requirement);
(e) to present credit in a minimum of 60 units of university level courses numbered 100 and above; at least 30 of these 60 units must normally be completed at this University (these are general University requirements; also see Credit by Course Challenge, page 15);
(f) to present at least 33 units (of the minimum 60 units required for a degree) of courses from *one* of the two following lists, thereby determining the degree requested:

Bachelor of Arts

Anthropology
Classics
Economics
English
Environmental Studies
French Language and Literature
Geography
Germanic Studies
Hispanic and Italian Studies
History
Liberal Studies
Linguistics
Mathematics and Statistics
Pacific and Asian Studies
Philosophy
Political Science
Psychology
Slavonic Studies
Sociology
Women's Studies

Bachelor of Science

Biochemistry and Microbiology
Biology
Chemistry
Computer Science
Earth Science
Economics
Geography
Linguistics (certain courses only, see Note, page 95)
Mathematics and Statistics
Physics and Astronomy
Psychology

(g) to meet the requirements for the degree program selected; see below, and under the individual departments and schools, pages 34 to 151.

DEGREE PROGRAMS LEADING TO THE B.A. AND THE B.Sc.

A student may proceed to either the B.A. or the B.Sc. degree, normally in one of three Programs: Honours, Major, or General (but see section on Joint Honours and Major, below). In most cases, by choosing courses carefully and consulting departmental requirements and prerequisites, students may postpone until the end of the Second Year the decision as to which program to select.

THE HONOURS PROGRAM

The Honours Program requires specialization in a single field in the last two or three years and is intended for students of above average ability. Students who plan to undertake graduate work are strongly advised to follow an Honours Program.

Admission to an Honours Program

Students planning to proceed in an Honours Program must consult the Chair of the department concerned, or the Chair's nominee, as early as possible in their academic career, and in any case, must obtain the consent of the department concerned to enter its Honours Program. This consent will normally be given only if:

(a) the department offers an Honours Program;
(b) the student has fulfilled the requirements of the first two years and has a grade point average of at least 3.50 in the work of the Second Year and in the field in which the student wishes to specialize; and
(c) the student has completed all prerequisite courses.

The department concerned must annually renew its permission for a student to continue on an Honours Program. If, in the opinion of the department, the student's work at any time is not of Honours standard, the student may be permitted to transfer to a Major or General program.

Requirements of the Honours Program

The number of units required for an Honours Program varies between 60 and 66, depending upon the requirements of the department concerned, which are set out on pages 34 to 151 of this Calendar, and which must be satisfied along with the requirements common to all degrees in the Faculty of Arts and Science, set out above.

A candidate for Honours may be required to present a graduating essay, to pursue a program of directed studies, or to participate in an Honours seminar. The final date for submitting graduating essays or research reports to the departments in the second term is left to the discretion of the department concerned.

A candidate for Honours may be required at the end of the final year to take a comprehensive examination — oral, written, or both.

Normally a student should complete the requirements for an Honours Program in four academic years. Students who are planning to complete a degree on a part time basis and who wish to be considered candidates for Honours should explore the options with the department concerned. Requests for extensions should be made through the department concerned to the Dean's office.

Honours degrees are of two classes: First and Second. Consult the entry of the department concerned for its requirements for each class of Honours degree. Students who pass their courses but fail to obtain at least Second Class (normally, a graduating average of 3.50 minimum) may, upon the recommendation of the department, be granted appropriate standing in a Major or General program. See Graduation Standing, page 37.

Honours Programs Leading to the B.A. or the B.Sc. Degree

A student may proceed to the B.A. or the B.Sc. degree in an Honours Program in one of the following:

Bachelor of Arts

Anthropology
Applied Linguistics
Classics
Economics
English
French
Geography
German
Greek
Hispanic Studies
History
Latin
Linguistics
Mathematics
Philosophy
Political Science
Psychology
Sociology

Bachelor of Science

Astronomy
Biochemistry
Biology
Chemistry
Combined Chemistry and Mathematics
Combined Computer Science and Mathematics
Earth Sciences
Economics
Geography
Linguistics
Mathematics
Microbiology
Physics
Physics and Mathematics
Psychology

Combined Honours: Offered in Chemistry/Mathematics; Computer Science/Mathematics. See pages 59, 66 and 67 for details.

Double Honours: With the joint approval of the departments concerned, a student may be permitted to meet the requirements for an Honours Program in each of two departments, both leading to the same degree, a B.A. or a B.Sc. Such a program may require an extra year of study, in which case approval of the Dean should be sought.*

Joint Honours and Major Programs: Where it is possible to do so within the period of four academic years required for Honours Programs, a student may elect to complete an Honours Program in one area of study together with a Major Program in another area of study, both leading to the same degree, a B.A. or B.Sc.*

Alternatively, a student may, with permission from the Dean, arrange for a Joint Honours and Major Program which will involve satisfying the Honours requirements and the Major requirements of two disciplines within the Faculty of Arts and Science, one of which leads to the B.Sc. degree while the other leads to the B.A. degree. In such cases, the student will receive either a B.Sc. or a B.A. degree, depending on which is specified by the Honours Program. Details of all such programs must be agreed upon by the student, the representatives of the academic units involved, and the Dean. The signed agreement will be on file in the Records Office.

THE MAJOR PROGRAM

The Major Program requires some specialization in one field in the last two years, and may permit the student to proceed to graduate study if sufficiently high standing is obtained, or to professional or business careers.

Requirements of the Major Program

The Major Program requires:

(a) the completion of the first 30 units in conformity with the regulations common to all degree programs given above;
(b) the completion of the remaining units in conformity with the regulations common to all degree programs given above, and including the following:
   1. 15 units of courses numbered 300 or 400, selected to meet the requirements of the Major program, as specified by the department concerned;
   2. at least 15 units of electives, which may include not more than 9 units prescribed by the Major department as corequisites.

Major Programs Leading to the B.A. and B.Sc.

A student may proceed to the B.A. or the B.Sc. degree in a Major program in one of the following:

Bachelor of Arts

Anthropology
Applied Linguistics
Classical Studies
Classics
Economics
English
French
Geography
German
Hispanic Studies
History
Linguistics
Mathematics
Philosophy
Political Science
Psychology
Russian
Sociology

Bachelor of Science

Astronomy
Biochemistry
Biology
Earth Sciences
Chemistry
Geography
Linguistics
Mathematics
Microbiology
Physics
Psychology

In addition, a student may proceed to a bachelor's degree in a Major program in one of the following Interdisciplinary Programs:

B.A. or B.Sc. Major in Environmental Studies: This is an interdisciplinary program designed to provide students with a concentration of courses in the area of environmental topics. A Major Program leading to the B.A. or the B.Sc. degree is offered, but the Major can only be taken as a Double Major or as a Joint Honours and Major with a second program. For details of the Environmental Studies program, see page 81.

B.A. with Major in Pacific Studies: The Pacific Studies program is designed to provide a concentration in the area of Pacific Studies for both educational and professional purposes. Details of the program are given on page 120.

B.A. Major in Women's Studies: This is an interdisciplinary program designed to provide students with a broad perspective on women's history, experience, and thought, as well as serving as an introduction to the new feminist scholarship in traditional academic disciplines. A Major Program leading to the B.A. or the B.Sc. degree is offered, but the Major can be taken only as a double Major or as a Joint Honours and Major with a second program. For details of the Women's Studies program, see page 150.

Combined Major: A student may elect to complete the requirements for a Combined Major Program leading to a B.A. in English and French (Canadian Literature) or to a B.Sc. in the following areas: Computer Science/Mathematics; Chemistry/Mathematics; Biochemistry/Chemistry; Microbiology/Chemistry; and Physics/Astronomy.

Double Major: A student may elect to complete the requirements for each of two Major Programs offered in the Faculty, both leading to the same degree, a B.A. or a B.Sc., except that Biochemistry cannot be combined with Microbiology and Physics cannot be combined with Astronomy for a double major, nor can any Combined Major program be used as a double major with a major program offered by either component department.*

Students may, with permission of the Dean, arrange for a Double Major program which will involve satisfying the Major requirements of two disciplines in the Faculty of Arts and Science, one of which normally offers programs leading only to the B.Sc. degree, while the other offers programs leading only to the B.A. degree. In such cases, the student will have the option of receiving either a B.A. or a B.Sc. Double Major degree. When one of the two departments concerned offers both a B.Sc. Major program and a B.A. Major program, the requirements of the program leading to the degree selected must be met in the department offering the option. Details of all such programs must be agreed upon by the student, the representatives of the academic units involved, and the Dean. The signed agreement will be on file in the Records Office.

Interfaculty Double Honours or Major: Students may arrange for an Interfaculty Double Honours or Major program through the Arts and Science Advising Centre. Such programs involve satisfying the Honours or Major requirements of two disciplines in two different Faculties. Agreement to details of all such programs must be signed by the students and by representatives of the academic units involved. Students on the interfaculty program will be subject to the regulations of the Faculty in which they are registered.*

* A student proceeding towards a B.A. or B.Sc. in a Double Honours, Joint Honours and Major, Double Major or Interfaculty Double Major program, shall be entitled to no more than one bachelor's degree upon completion of any of these programs. Students seeking a second bachelor's degree should consult the regulations on page 20 under A Second Bachelor's Degree.

THE GENERAL PROGRAM

The General Program may lead to professional careers or to graduate studies, depending upon the level of competence demonstrated therein; its distinctive characteristic, however, is the breadth of the education for which it provides.

Requirements of the General Program

The General Program requires:

(a) the completion of the first 30 units in conformity with the regulations common to all degree programs given above;
(b) completion of the remaining units in conformity with regulations common to all degree programs given above, and including the following:
   1. 9 units taken in courses numbered 300 and above in each of *two* fields, as may be specified by the departments concerned;
   2. 12 units of electives which may include not more than 6 units prescribed by the departments as corequisites.

General Programs Leading to the B.A.

Option A

A student may proceed to a B.A. degree in a General program in any *two* of the following:

Anthropology
Chinese Studies
Classics
Economics
English
French
Geography
German
Hispanic Studies
History
Italian Studies
Japanese Studies
Linguistics
Mathematics
Pacific Studies
Philosophy
Political Science
Psychology
Russian
Sociology

Option B

A student may also proceed to the B.A. degree in a General program which combines *one* of the above fields with *one* of the following:

Biochemistry and Microbiology
Biology
Chemistry
Computer Science
Earth Sciences
Physics

Option C

A student may also proceed to the B.A. degree in the General program by combining any *one* of the fields listed in Options A or B with *one* of the following:

Environmental Studies
Medieval Studies
Women's Studies

General Programs Leading to the B.Sc.

A student may proceed to a B.Sc. degree in a General program in any *two* of the following:

Biochemistry and Microbiology
Biology
Chemistry
Computer Science
Earth Sciences
Geography
Mathematics
Physics
Psychology

MINOR

A student who elects to complete the course requirements for an Honours or Major program and, in addition, completes those courses prescribed for one of the fields listed under the General Program, will receive a Minor in that field. The Minor would be added to the student's academic record only if the courses taken for the Minor do not form part of the requirements for the Honours or Major program and only if the student formally declares the Minor Program through the Arts and Science Advising Centre. Only one Minor may be declared on any degree program.

Interfaculty Minor: A student who completes the requirements for a degree in another faculty and, in addition, completes those courses prescribed for one of the fields listed under the General Program in the Faculty of Arts and Science may receive a Minor in that field. The Minor will be added to the student's academic record only if the student formally declares the Minor Program through the faculty administering the Bachelor's degree. Only one Minor may be declared on any degree program.

DEGREE PROGRAMS LEADING TO THE B.Comm.

A B.Comm. is also offered; for admission requirements and programs available see The School of Business entry, page 54.

COOPERATIVE EDUCATION PROGRAMS

Please refer to page 32 of the Calendar for a general description of Cooperative Education.

Admission to and completion of Cooperative Education Programs are governed by individual departmental requirements. In general, students participating in the Cooperative Education Program must maintain at least a second class (3.50) average overall. As a required part of the program, students are employed for specific Work Terms, each with a minimum duration of 13 weeks. This employment is related as closely as possible to the student's course of studies and individual interest.

In addition to the graduation requirements outlined on page 20, a student must have a graduating average of at least 3.50 in order to graduate with the Cooperative Education notation.

Students may withdraw from the Cooperative Education program at any time and may remain enrolled in a Major or Honours program offered by the Department.

Details of the undergraduate programs in Biology, Biochemistry and Microbiology, Chemistry, Computer Science, Geography, Linguistics, Mathematics, Physics, and the School of Business are outlined in the departmental sections of the Calendar.

The Arts Cooperative Education Program, offered by the Departments in the Humanities Division of the Faculty, has specific admission requirements and standards in addition to those mentioned above. This program is described on page 41.

DIPLOMA PROGRAMS

Two diploma programs are offered: the Diploma in Applied Linguistics, offered by the Department of Linguistics (see page 109), and the Diploma in Humanities, offered by the departments in the Humanities Division of the Faculty (see page 107).

OTHER INFORMATION REGARDING CREDIT AND COURSES

CREDIT FOR SUMMER STUDIES COURSES

Credit obtained in May-August courses may be combined with that obtained in Winter Session to complete degree requirements. The maximum credit for May-August work in any one calendar year is 9 units (see Summer Studies entry elsewhere in this Calendar and the Summer Studies Supplement to the Calendar, published in January).

TIME LIMIT FOR DEGREE COMPLETION

Although the Faculty of Arts and Science imposes no time limit for the completion of a General or Major B.A. or B.Sc., Honours degrees are normally completed within four years. Certain departments, with the approval of Faculty, may impose stated time limits for the completion of Major and General programs in their areas.

LANGUAGE LABORATORIES

Many courses offered by modern language departments include language laboratories intended to reinforce the learning of basic speech patterns and idioms and to complement the active use of the language in the classroom.

CREDIT FOR COURSES OFFERED BY OTHER FACULTIES

Recognized Courses Offered by Other Faculties:

All courses offered by the Department of Computer Science (Faculty of Engineering) are acceptable for credit in the Faculty of Arts and Science.

The following First Year courses in the Faculty of Fine Arts are recognized for elective credit in the Faculty of Arts and Science: (see pages 203-228)

Art 150
Creative Writing 100/101
History in Art 120
Music 101 A/B, 110, 115
Theatre 100

Students in other than First Year should note that the following courses in the Faculty of Education and the Faculty of Fine Arts, in addition to those mentioned above, are acceptable for elective credit in the Faculty of Arts and Science.

Art 350
Creative Writing: All courses marked with an asterisk
History in Art: All courses marked with an asterisk
Music: All courses marked with an asterisk
Theatre: All courses marked with an asterisk

Other Courses outside the Faculty of Arts and Science: In addition to the above courses, students are permitted to take for credit a total of 6 units of free electives chosen without restriction from any undergraduate courses offered in this University (except for Physical Education activity courses, e.g. 104-125, 461, 463, and School Experience or Practicum courses, e.g. Education-P 197, 297, 398, 498), where the regulations of the departments offering the courses permit, and prerequisites are met.

In exceptional cases, a student in a Major or Honours program may receive additional units of credit towards a degree program in the Faculty of Arts and Science for undergraduate courses not recognized in the Faculty of Arts and Science, provided that prior written permission has been obtained from the department in which the student wishes to undertake a Major or Honours program. In no case, however, may such credit be used to replace that specified for the Major or Honours program selected, nor may the credit for such courses be later transferred to another Major or Honours program unless the credit is then accepted by the department concerned.

Students on a General program who may wish to receive credit for more than 6 units for unrecognized courses offered by other faculties must secure the approval of the Assistant Dean of Arts and Science.

CREDIT FOR STUDIES ELSEWHERE

Students who plan to undertake work at other universities must receive prior approval from the Dean if they wish such courses to be credited towards a degree program in the Faculty of Arts and Science. This applies particularly to courses at the 300 and 400 level and to courses which are included in the last 15 units of a degree program. Upon successful completion of such work, the student must request the Registrar of the other university to send an official transcript of record to the Records Office of the University of Victoria.

Students authorized to attend another institution who accept a degree from that institution abrogate the right to a University of Victoria degree until they have satisfied the University's requirements for a second bachelor's degree (see page 20).

Normally, the Faculty requires all students qualifying for a degree to complete at the University of Victoria at least twelve upper level units of the fifteen required for a Major Program, or at least six of the nine upper level units required in each area of the General Program. Students on Honours programs normally may take at another university no more than six upper level units in the discipline in which they are taking Honours, and then only with the approval of the Honours Adviser. In addition, students should complete at the University of Victoria at least eighteen of the twenty-one upper level units required for all degree programs.

GRADUATION STANDING

The graduation standing of students in the Faculty of Arts and Science is determined in accordance with the University regulations on page 19 of the Calendar, except that the determination of the class of degree in an Honours program may be subject to conditions specified by the department concerned. Honours students should note, in particular, that the graduating average alone may not form the basis for determining eligibility for a First Class or Second Class Honours degree.

When a student graduates in a Double Honours program or a Joint Honours and Major program, the class of degree shall be determined in accordance with the regulations of each of the two disciplines. If one discipline is governed only by the University regulation (page 20), then in the computation of the graduating average for this discipline, 15 units of the discipline's own required courses shall be used when the number of units earned in upper level courses exceeds 30.

In any case where two different classes of degree result, each class shall be tied to the respective discipline instead of the degree, and shall be shown in the student's academic record.

COURSES OPEN TO FIRST YEAR STUDENTS

For the guidance of students entering First Year, the following is a list of courses open to First Year students. In some cases prerequisites are specified. In others permission of the department is required. Students should consult the appropriate departmental entry elsewhere in this Calendar. Under certain circumstances, courses numbered 300 and above may be included in a student's graduating average (see page 20).

Anthropology 100A, 100B
Astronomy 120
Biology 101, 150A/B
Chemistry 100, 101, 102, 140
Chinese 100A/B, 149, 150
Classical Studies 100, 200, 250
Commerce 100
Earth and Ocean Sciences 100, 101
Economics 100, 201, 202
Environmental Studies 101
English 099, 115, 116, 121, 122
French 100, 160, 165, 180, 181, 182
Geography 101A/B, 102
German 100, 149, 200, 204
Greek 100
History 105, 130, 205, 210, 220, 234, 236, 240, 250, 251, 253, 254, 255, 256, 260
Italian 100, 200
Japanese 100A/B, 149, 150, 201A/B
Latin 100
Liberal Arts 306, 307
Linguistics 100A, 100B
Mathematics 100, 101, 102, 151, 160A, 160B
Pacific Studies 200, 253, 254, 255, 256
Philosophy 100, 201, 203, 211, 214, 220, 232, 233, 235, 238, 242, 245, 269, 287
Physics 100, 102, 103, 110, 120, 125, 220
Political Science 100
Psychology 100
Russian 100, 149, 301, 304 331, 390
Serbo-Croatian 300
Sociology 100, 103
Spanish 100, 150, 200, 250, 260
Statistics 250

UNDERGRADUATE COURSES IN ARTS AND SCIENCES

Course	Page
Anthropology	38
Astronomy	130
Biochemistry	42
Biology	44
Business	54
Chemistry	57
Chinese	119
Classical Studies	62
Commerce	54
Computer Science (see Faculty of Engineering)	
Creative Writing (see Faculty of Fine Arts)	
Earth and Ocean Sciences	67
Economics	69
English	73
Environmental Studies	81
French	84
Geography	87
German	95
Greek	62
History	100
History in Art (see Faculty of Fine Arts)	
Humanities	107
Italian	97
Japanese	119
Latin	62
Liberal Arts	107
Linguistics	108
Marine Science	44
Mathematics	112
Medieval Studies	118
Microbiology	42
Pacific Studies	119
Philosophy	126
Physics	130
Political Science	135
Psychology	139
Russian	145
Serbo-Croatian	145
Slavonics	145
Sociology	147
Spanish	97
Statistics	112
Women's Studies	150

DEPARTMENT OF ANTHROPOLOGY

David S. Moyer, B.A. (Franklin and Marshall Coll.), M.A. (Harv.), Ph.D. (Leiden), Associate Professor and Chair of the Department
William H. Alkire, B.A. (Wash.), M.A. (Hawaii), Ph.D. (Ill.) Professor
N. Ross Crumrine, B.A. (Northw.), M.A., Ph.D. (Ariz.), Professor
Leland H. Donald, B.A. (Emory), Ph.D. (Ore.), Professor
Donald H. Mitchell, B.A., B.Com., M.A. (Brit. Col.), Ph.D. (Ore.), Professor
Orville S. Elliot, A.B. (Middlebury), A.M., Ph.D. (Harv.), Associate Professor
Nicolas Rolland, B.Sc., M.A. (Montr.), Ph.D. (Cantab.), Associate Professor
Eric A. Roth, B.A. (Missouri), M.A., Ph.D. (Tor.), Associate Professor
Peter H. Stephenson, B.A. (Ariz.), M.A. (Calg.), Ph.D. (Tor.), Associate Professor
Kathleen A. Berthiaume, B.A. (U. of Vic.), M.A., Ph.D. (Mich.), Assistant Professor
Margot Wilson-Moore, B.A., M.A.(Tor.), M.A., Ph.D. (Southeastern Methodist), Assistant Professor

Visiting and Adjunct Appointments:

Frances White Chapin, B.A. (Colo.), M.A., Ph.D. (Wis.), Adjunct Assistant Professor (1991-92)
S. Gay Frederick, B.A. (Brit. Col.), M.A. (U. of Vic.), Ph.D. (Brit. Col.), Adjunct Assistant Professor (1991-92)

GRADUATE PROGRAM

For information on studies leading to the M.A. degree, see page 236.

GENERAL, MAJOR AND HONOURS PROGRAMS

While neither Anthropology 100A nor 100B is required for the General Major, or Honours programs, First Year students who plan to undertake any of these programs are urged to enroll in the introductory courses.

General — *Second Year:* 200A, 200B, 240 and 250; *Third and Fourth Years:* nine additional units of Anthropology chosen from courses numbered 300 and above.

Major —*Second Year:* 200A, 200B, 240 and 250; *Third and Fourth Years:* a total of 15 units in Anthropology consisting of:

(a) 300A;
(b) at least one of 341A, 341B or 342;
(c) at least one of 350A, 350B, 353, 451 or 453;
(d) one and a half units of 322, 323, 324, 325, 326, 327, 329, 330, 334, and an additional one and a half units from the preceding list or from 335, 336, 339A, 339B;
(e) three units from 316, 317, 400A, 400B, 441;
(f) four and one half units from 300B, 300C, 304, 305, 306, 310, 311

312, 341A, 341B, 342, 350A, 350B, 401, 405, 406, 407, 418, 419, 449, 451, 453;

and at least 1½ units from Linguistics 100A, 100B, 360, 361, or 1½ units of Linguistics chosen in consultation with the Department of Anthropology.

Students who are allowed to take 390 or 490 should consult the Department when planning their programs.

NOTE: Anthropology 341A, 341B, or 342 cannot be used to satisfy both requirements (b) and (f). Anthropology 350A, 350B, 353, 451, 453 cannot be used to satisfy both requirements (c) and (f).

Honours — *Second Year:* Students who have achieved at least high Second Class standing in Anthropology 200A, 200B, 240 and 250 may be admitted to the Third Year in the Honours Program with the permission of the Department; *Third and Fourth Years:* Students will offer at least 30 units of which 22½ must be in Anthropology and include:

(a) 300A; 350A; 350B; 499; and at least two of 341A, 341B, 342;
(b) three units chosen from 316, 317, 400A, 400B
(c) one and a half units from 322, 323, 324, 325, 326, 327, 329, 330, 334; and an additional one and a half units either from the preceding lists, or from 335, 336, 339A, 339B;
(d) six units chosen to include at least one and a half units from each of the following groups:
  (i) 300B, 300C, 304, 305, 306, 310, 311, 312;
  (ii) 341A, 341B, 342, 353, 449, 451, 453;
  (iii) 401, 405, 406, 407, 418, 419, 441.

In addition students will be expected to achieve satisfactory standing in at least three units of courses in Linguistics chosen in consultation with the Department.

NOTE: Anthropology 341A, 341B or 342 cannot be used to satisfy both requirements (a) and (d).

In addition to University requirements concerning Honours Degrees, the Department of Anthropology requires: (1) a grade point average of 6.50 or higher in upper level courses in Anthropology for a First Class Honours Degree and (2) a grade point average of 3.50-6.49 in upper level courses in Anthropology for a Second Class Honours Degree. A student who fails to attain a grade point average of 3.50 or higher but who completes the requirements for the Major Degree may be awarded a Major Degree.

UNDERGRADUATE COURSES

Prerequisite for Third and Fourth Year Courses:

Courses numbered 300 and above may be chosen as electives if one of the following conditions is satisfied:

Courses numbered 300 and above can be taken if the prerequisites are met or if the student has at least Third Year standing and permission of the Department. For courses carrying A or B designations, A is NOT a prerequisite of B unless this is specifically stated.

Students should consult the Department concerning courses offered in a particular year.

(Course offering codes: Y = Sept.-Apr., F = Sept.-Dec., S = Jan.-Apr., X = May-Aug., NO = Not offered, this session)

ANTH 100A (formerly half of 100) (1½) INTRODUCTION TO HUMAN EVOLUTION AND PREHISTORY
An introductory survey of the fields of biological anthropology and prehistoric archaeology; topics include the basis of human evolution, a survey of nonhuman primates, the human fossil record, cultural beginnings and stone age cultures, origins and development of agriculture and urban civilizations. (3-0)

ANTH 100B (formerly half of 100) (1½) INTRODUCTION TO CULTURAL ANTHROPOLOGY
An introductory survey of the field of ethnology; topics for discussion include subsistence patterns, political and economic systems, kinship, language, religion and magic. (3-0)

ANTH 200A (formerly half of 200) (1½) CULTURAL AND SOCIAL ANTHROPOLOGY: I
An introduction to the analysis of sociocultural systems. Major topics to be considered include the concept of culture, subsistence, production and distribution systems and social organization and kinship. Examples will be taken from societies representing different levels of complexity and various parts of the world. (*Prerequisite:* At least Second Year standing or completion of 100B) (3-0)

ANTH 200B (formerly half of 200) (1½) CULTURAL AND SOCIAL ANTHROPOLOGY: II
A continuation of 200A. Major topics to be considered include political, religious, and symbolic systems, expressive culture, and culture change. Examples will be taken from societies representing different levels of complexity and various parts of the world. (*Prerequisite:* 200A) (3-0)

ANTH 240 (1½) ARCHAEOLOGY
An introduction to archaeological research and problems of interpretation. Laboratories will provide an opportunity to become familiar with archaeological materials and with some basic techniques of analysis. (*Prerequisite:* At least Second Year standing or completion of 100A) (2-2)

ANTH 250 (1½) PHYSICAL ANTHROPOLOGY
An introduction to the investigation of biological characteristics of human populations; evolution of human populations. Laboratories will introduce students to some basic techniques used in the study of physical anthropology. (*Prerequisite:* At least Second Year standing or completion of 100A) (2-2)

ANTH 300A (formerly part of 300) (1½) KINSHIP AND MARRIAGE
Comparative analysis of kinship and kinship based groups, especially descent groups; marriage in cross cultural perspective; the emphasis is placed on nonstate societies. (*Prerequisite:* 200A and 200B) (3-0)

ANTH 300B (formerly part of 300) (1½) COMPARATIVE SOCIAL STRUCTURE
Comparative analysis of social structure emphasizing material from nonstate societies; nonkin institutions such as age grades and secret societies, as well as those based on kinship are discussed. (*Prerequisite:* 300A) (3-0)

ANTH 300C (formerly part of 300) (1½) COMPLEX SOCIETIES IN CROSS CULTURAL PERSPECTIVE
Cross cultural analysis of societies where stratification and/or the state are major features of society; peasant society, caste, slavery, and the development of social inequality are among the major topics discussed. (*Prerequisite:* 300A) (3-0)

ANTH 304 (1½) TECHNOLOGY IN CULTURE
A review of technology from its protocultural foundations. The course surveys various techniques and places them in chronological, geographical and cultural context. (*Prerequisite:* 100A or 100B, or 200A and 200B, or 321) (3-0)

ANTH 305 (1½) ANTHROPOLOGY OF THE ARTS
Comparative approaches to the arts in different cultural traditions with special emphasis on the arts of prehistoric and nonliterate cultures. (*Prerequisite:* 100B, or 200A and 200B, or 321) (3-0)

ANTH 306 (1½) FOLKLORE AND MYTHOLOGY
Oral traditions of nonliterate peoples. The structure and functions of specific types of material. The relation of the study of folklore and mythology to other interests in Anthropology. (*Prerequisite:* 100B, or 200A and 200B, or 321) (3-0)

ANTH 310 (1½) ANTHROPOLOGICAL APPROACHES TO COMPARATIVE RELIGION
Consideration of the various approaches to the study of religion and religious behaviour used by anthropologists. Comparative analysis of belief and ritual systems. (*Prerequisite:* 100B, or 200A and 200B, or 321) (3-0)

ANTH 311 (formerly 211) (1½) INTRODUCTION TO APPLIED ANTHROPOLOGY
An introduction to the acquisition of culturally appropriate data for the solution of practical problems arising in the context of social change. The course surveys applications of anthropological research to various fields such as agricultural development, population planning, the impact

of technological change, education, law, medicine, and heritage resource management. (*Prerequisite:* 100B or 200A) (3-0)

ANTH 312 (formerly 412) (1½) MEDICAL ANTHROPOLOGY
Practices and beliefs of selected societies related to the concept of "health" are described and problems of disease prevention, identification, and treatment in crosscultural situations are examined. Topics covered may include: epidemiology; disease and evolution; and transcultural nursing and psychiatry. (*Prerequisite:* 100A or 250, and 100B or 200A) (3-0)

ANTH 316 (formerly 416) (1½) INTRODUCTION TO ANTHROPOLOGICAL RESEARCH: I
Designed to introduce students to research methods suitable for anthropological problems. Emphasis is placed on formulation of researchable anthropological propositions, research design, and elementary techniques of data analysis. (*Prerequisite:* At least three of 200A, 200B, 240, 250) (3-0)

ANTH 317 (formerly 417) (1½) INTRODUCTION TO ANTHROPOLOGICAL RESEARCH: II
Formal methods of analysis in Anthropology, especially statistics, problems of validation, and the comparative method. (*Prerequisite:* 316 (formerly 416)) (2-2)

ANTH 321 (3) CULTURES AND PEOPLES OF THE WORLD
A broad introductory survey of comparative ethnography, including discussion of the major cultural regions of the world and selected examples of societies at various levels of complexity. (*Prerequisite:* At least Third Year standing or 100B) (3-0)

ANTH 322 (1½) ETHNOLOGY OF NORTH AMERICA
The major culture areas of aboriginal North America with description and analysis of selected cultures; introduction to problems in the interpretation of North American ethnology. (*Prerequisite:* 100B, or 200A and 200B, or 321) (3-0)

ANTH 323 (1½) ETHNOLOGY OF CIRCUMPOLAR REGION
The cultures of Arctic and sub-Arctic Eurasia and North America. (*Prerequisite:* 100B, or 200A and 200B, or 321) (3-0)

ANTH 324 (1½) ETHNOLOGY OF MIDDLE AMERICA
An integrated description and analysis of the cultural history and present day economic, social, political, and religious ways of life of selected Indian and mestizo groups of Mexico and Central America; recent changes and modern trends in cultural development. (*Prerequisite:* 100B, or 200A and 200B, or 321) (3-0)

ANTH 325 (1½) ETHNOLOGY OF SOUTH AMERICA
An integrated description and analysis of the cultural history and present day economic, social, political, and religious ways of life of selected Indian groups of South America. (*Prerequisite:* 100B, or 200A and 200B, or 321) (3-0)

ANTH 326 (1½) ETHNOLOGY OF OCEANIA: MICRONESIA AND POLYNESIA
Ethnological description and analysis of the cultures of Micronesia and Polynesia. (*Prerequisite:* 100B, or 200A and 200B, or 321) (3-0)

ANTH 327 (1½) ETHNOLOGY OF OCEANIA: AUSTRALIA AND MELANESIA
Ethnological description and analysis of the aboriginal peoples and cultures of Australia and Melanesia. (*Prerequisite:* 100B, or 200A and 200B, or 321) (3-0)

ANTH 329 (1½) ETHNOLOGY OF SOUTHEAST ASIA
An integrated description and analysis of the peoples and cultures of Mainland and Island Southeast Asia. (*Prerequisite:* 100B, or 200A and 200B, or 321) (3-0)

ANTH 330 (½) ETHNOLOGY OF SOUTH ASIA
Ethnological description and analysis of the peoples and cultures of the Indian subcontinent. (*Prerequisite:* 100B, or 200A and 200B, or 321) (3-0)

ANTH 334 (1½) ETHNOLOGY OF SUB-SAHARAN AFRICA
A survey of the traditional cultures of sub-Saharan Africa; recent changes and problems of modernization. (*Prerequisite:* 100B, or 200A and 200B, or 321) (3-0)

ANTH 335 (1½) CANADIAN ETHNIC GROUPS
An anthropological perspective on the ethnic groups of Canada. The groups will be studied in the context of the wider literature of race relations, minority groups, and ethnicity. (*Prerequisite:* 100B, or 200A and 200B, or 321) (3-0)

ANTH 336 (1½) THE CONTEMPORARY CANADIAN INDIAN
The native Indian in modern Canadian society. Comparison with the situation of other native peoples in various parts of the world. (*Prerequisite:* 100B, or 200A and 200B, or 321) (3-0)

ANTH 339A (1½) INDIANS OF THE NORTHWEST INTERIOR
A survey of the groups and cultures of the Plateau culture area and the adjacent portion of the sub-Arctic culture area. (*Prerequisite:* 100B, or 200A and 200B, or 321) (3-0)

ANTH 339B (1½) INDIANS OF THE NORTHWEST COAST
A survey of groups and cultures of the Northwest Coast culture area. (*Prerequisite:* 100B, or 200A and 200B, or 321) (3-0)

ANTH 341A (1½) EARLY STONE AGE SOCIETIES
A review of the formative phases in the development of prehistoric cultures and societies during the Pleistocene/early Holocene in Africa, Eurasia and Australasia. Archaeological evidence on cultural beginnings, ecology, subsistence systems, technology and social life of early mankind. (*Prerequisite:* 240) (3-0)

ANTH 341B (1½) EMERGENCE OF CIVILIZATION
A review of the archaeological record on: the origin of animal/plant husbandry, sedentary village life and pastoralism, technological innovation and social life; of subsequent developments leading to the appearance of the first cities, state institutions and stratified societies in major centres of the Old World. (*Prerequisite:* 240) (3-0)

ANTH 342 (1½) ARCHAEOLOGY OF PRECOLUMBIAN AMERICA
A survey of the archaeological record for the development of aboriginal cultures and societies of the New World prior to European colonization, from late Ice Age settlement of North and South America through the appearance of farming villages up to the growth of urban civilizations of middle America and the Andes. (*Prerequisite:* 240) (3-0)

ANTH 350A (1½) PRIMATOLOGY
A detailed survey of the field of primatology including taxonomy, genetics, morphology, palaeontology, ecology, zoogeography, growth and behaviour of the primates. (*Prerequisite:* 250) (3-0)

ANTH 350B (1½) HUMAN PALAEONTOLOGY
An examination of the fossil evidence for human evolution emphasizing the interpretation and reconstruction of the human lineage. (*Prerequisite:* 250) (3-0)

ANTH 353 (1½) NUTRITIONAL ANTHROPOLOGY
A cross cultural examination of the effects of nutrition on past and present human populations. Aspects of this course will include human evolution, growth and development, demography, population dynamics and physical variation. (*Prerequisite:* 250) (3-0)

ANTH 390 (1½) SELECTED PROBLEMS IN ANTHROPOLOGY
Presentation of selected problems in Anthropology. Students interested in this course should enquire at Registration when the course is to be offered and what substantive areas are to be studied. Students may enrol in this course in different areas for a maximum of 3 units. (*Prerequisite:* Permission of Department) (3-0)

ANTH 400A (1½) (formerly part of 400) HISTORY OF ANTHROPOLOGICAL THEORY
History and development of the major trends in anthropological theory until the mid-twentieth century. (*Prerequisites:* three of 200A, 200B, 240 and 250, and Fourth Year standing) (3-0)

ANTH 400B (1½) (formerly part of 400) CURRENT TRENDS IN ANTHROPOLOGICAL THEORY
Survey of recent developments in anthropological theory. (*Prerequisites:* three of 200A, 200B, 240, and 250, and Fourth Year standing) (3-0)

ANTH 401 (1½) CULTURAL ECOLOGY
Theories concerning the relationship of human groups, culture and environment; cultural systems as the means which human populations adapt to their environments. (*Prerequisites:* 200A and 200B) (3-0)

ANTH 405 (1½) ECONOMIC ANTHROPOLOGY
A comparative analysis of the social context of production, distribution and exchange systems. (*Prerequisites:* 200A and 200B) (3-0)

ANTH 406 (1½) POLITICAL ANTHROPOLOGY
Comparative analysis of governing institutions in societies ranging from tribal groups to various types of state organizations. In each type of political system, the modes of allocating decision making powers and administrative authority will be examined. (*Prerequisites:* 200A and 200B) (3-0)

ANTH 407 (1½) SYMBOLIC ANTHROPOLOGY
The nature of symbolic systems in human societies; material examined includes not only manifestly symbolic systems such as religion and art but also systems of classification in general, particularly those closely related to the social order. (*Prerequisites:* 200A and 200B) (3-0)

ANTH 418 (formerly SOCI 418) CULTURAL AND SOCIAL CHANGE
Survey of the theories advanced to explain cultural and social change. Special attention will be given to the issues arising from the impact of complex cultures upon the native peoples of Africa, Asia, the Pacific and the Americas. (*Prerequisites:* 200A and 200B) (3-0)

ANTH 419 (SOCI 419) (1½) MODERNIZATION AND DEVELOPMENT
An examination of selected theories and research on development, underdevelopment and dependence in the modern world; examples will be taken from various parts of the world, including Canada. (3-0)

ANTH 441 (1½) ARCHAEOLOGICAL METHOD AND THEORY
The strategy of research in archaeology; archaeology as a subdiscipline and its comparison with related fields; the course emphasizes theories of research methodology in archaeology as well as the contribution of archaeology to theories of cultural process. (*Prerequisite:* 240; *pre- or corequisite:* 317 or 417 or a course in statistics acceptable to the Department) (3-0)

ANTH 449 (1½) ARCHAEOLOGY OF THE PACIFIC NORTHWEST
Intensive study of problems of interpreting Pacific Northwest archaeological data. Field trips will be scheduled. (*Prerequisite:* 240) (2-3)

ANTH 451 (1½) HUMAN OSTEOLOGY
This course is designed to familiarize students with theoretical and methodological approaches to the study of human skeletal remains. (*Prerequisite:* 250) (2-3)

ANTH 453 (1½) POPULATION STRUCTURE AND HUMAN EVOLUTION
Analysis of the population dynamics of prehistoric and contemporary preindustrial populations in an evolutionary context. (*Prerequisite:* 250) (2-3)

ANTH 490 (1½-3) DIRECTED STUDIES
Students may register for this course in the Fourth Year of the Major or Honours Program with permission of the Department and the Instructor. (*Prerequisite:* Fourth Year standing and permission of the Department)

ANTH 499 (3) HONOURS SEMINAR AND GRADUATING ESSAY

ARTS COOPERATIVE EDUCATION PROGRAM

The Arts Cooperative Education Program is a year round program which, through work terms of employment in a variety of organizations, enables students to combine work experience with an education in the humanities.

To qualify for admission into the Arts Coop Program, a student must be proceeding to an Honours or Major B.A. degree in one or more of the following Departments: Classics, English, French Language and Literature, Germanic Studies, Hispanic and Italian Studies, History, Linguistics, Pacific and Asian Studies, Philosophy and Slavonic Studies. In addition, a student must be registered in at least fifteen units of course work and must have achieved at least a 5.00 Grade Point Average in first year. A formal interview to determine the student's interests, abilities and aptitudes will be required before admission.

To continue in the program, a student must be a full time student enrolled in a program leading to an Honours or Major B.A. degree in one of the Departments listed in the previous paragraph, and must maintain a G.P.A. of at least 5.50 in the courses in the major area, and at least a 5.00 average overall.

To receive the Coop notation on graduation, a student must complete at least 15 units of approved Arts Coop courses (see below), must complete satisfactorily the Work Term Preparation Seminar prior to the first work term, and must perform satisfactorily in each of at least four Work Terms. Details of Work Terms are recorded on the Record of Work Terms which is attached to the student's academic record and transcript.

The Arts Coop Program is designed to provide students with an academic background and certain skills appropriate to a wide range of careers. In particular, students will be required to select a program of studies intended to ensure that they

- are capable of clear and precise oral and written communication in English
- acquire some understanding of management practice and the Canadian financial system
- are aware of the Canadian historical and political context
- are aware of the social impact of science and technology, with particular emphasis on computing.

A student's selection of Arts Coop courses must be approved by both the Arts Coop Coordinator and the responsible departmental adviser.

COURSES

Students must complete a minimum of 15 units, in addition to the requirements for the Major or Honours program. Nine units will be selected from the following list and should be completed by the end of third year:

CSC	100	(1½)	Elementary Computing
ECON	100	(1½)	The Canadian Economy — Problems and Policies
ENGL	215	(1½)	The Writing of Expository Prose
OR			
ENGL	225	(1½)	Technical Communications: Written and Verbal
HIST	130	(3)	History of Canada
PHIL	201	(1½)	Applied Logic: I
OR			
PHIL	203	(1½)	Applied Logic: II
PHIL	220	(1½)	Introduction to Philosophy of Science
POLI	100	(3)	Canadian Government and Politics
OR			
POLI	470	(3)	Government in Canada

Other relevant training and experience may be considered at the time of admission to assist students with the selection of the remaining 6 units.

Applications and further information about the Arts Co-operative Education Program may be obtained from the Arts Co-op Co-ordinator in the Office of Co-operative Education Programs (Room 110, Campus Services Building).

DEPARTMENT OF BIOCHEMISTRY AND MICROBIOLOGY

Trevor J. Trust, B.Sc., M.Sc., Ph.D. (Melb.), Professor and Chair of the Department
J. Thomas Buckley, B.Sc., Ph.D. (McG.), Professor
Edward E. Ishiguro, B.A., M.A. (San Fran. St. Coll.), Ph.D. (Ill.), Professor
William W. Kay, B.Sc. (Agr.), M.Sc., Ph.D. (Brit. Col.), Professor
Alastair T. Matheson, B.A., M.Sc. (Brit. Col.), Ph.D. (Tor.), F.R.S.C., Professor
Terry W. Pearson, B.Sc., Ph.D. (Brit. Col.), Professor
Robert W. Olafson, B.Sc., M.Sc. (Brit. Col.), Ph.D. (Alta.), Associate Professor
Paul J. Romaniuk, B.Sc., Ph.D. (McM.), Associate Professor
Juan Ausio, B.Sc., Ph.D. (Barcelona), Assistant Professor
Santosh Misra, B.Sc., M.Sc. (Delhi), Ph.D.(McM.), Assistant Professor
Francis E. Nano, A.B. (Oberlin), M.S., Ph.D.(Ill.), Assistant Professor
Kathleen N. Cliff, B.Sc., M.Sc. (Alta.), Senior Laboratory Instructor
Rozanne Poulson, B.Sc., Ph.D. (Wales), Administrative Officer and Adjunct Assistant Professor
Glen R. Pryhitka, B.Sc. (Brit. Col.), Senior Laboratory Instructor

Visiting and Adjunct Appointments:
Donald W. Westlake, B.S.A., M.S.A. (Brit. Col.), Ph.D. (Wis.), Visiting Professor (1989-91)
Thomas P. Mommsen, M.Sc., Ph.D. (Freib.) Adjunct Assistant Professor (1990-92)

GRADUATE PROGRAMS

For information on studies leading to the M.Sc. or Ph.D. degrees, see page 237.

GENERAL, MAJOR, AND HONOURS PROGRAMS

The Department offers Honours and Major programs in Biochemistry or Microbiology. Students seeking careers as professional Biochemists or Microbiologists, or those who wish to continue their studies through graduate school to the M.Sc. and Ph.D. level are advised to take one of the Honours programs. The Major programs may also provide entry to the professions or to graduate school and are suitable for teaching at the secondary school level. The Department also offers a concentration in Biochemistry and Microbiology as part of the B.Sc. and B.A. degree General programs.

BIOCHEMISTRY AND MICROBIOLOGY PROGRAMS

General	Major	Honours
First Year		
	ENGL 121(or 115) (1½)	ENGL 121 (or 115) (1½)
	ENGL 122(or 116) (1½)	ENGL 122 (or 116) (1½)
MATH 100/101 (3)	MATH 100/101 (3)	MATH 100/101 (3)
CHEM 100/102 or 101/102 or 140/245 or 102/140 (3)	CHEM 100/102 or 101/102 or 140/245 or 102/140 (3)	CHEM 100/102 or 101/102 or 140/245 or 102/140 (3)
Two of PHYS 110 (or 125)/120/220 or at least a grade of B in PHYS 102 (3)	Two of PHYS 110 (or 125)/120/220 or at least a grade of B in PHYS 102 (3)	Two of PHYS 110 (or 125)/120/220 or at least a grade of B in PHYS 102 (3)
Other courses (6)	Other courses (3)	Other courses (3)
Second Year		
STAT 250/251 (or BIOL 250/251)¤ (3)	STAT 250/251 (or BIOL 250/251)¤ (3)	STAT 250/251 (or BIOL 250/251)¤ (3)
CHEM 231 (1½)	CHEM 231 (1½)	CHEM 231 (1½)
CHEM 213 (1½)	CHEM 213 (1½)	CHEM 213 (1½)
CHEM 235 (1½)	CHEM 235 (1½)	CHEM 235 (1½)
BIOC 200 (1½)	BIOC 200 (1½)	BIOC 200 (1½)
BIOL 200 (1½)	BIOL 200 (1½)	BIOL 200 (1½)
MICR 200 (3)	MICR 200 (3)	MICR 200 (3)
Other courses (1½)	Other courses (1½)	Other courses (1½)

* recommended
¤ See Note 4, in right column

Third and Fourth Years	Third Year	Third Year
BIOC 300 (3)	CHEM 222 (1½)	CHEM 222 (1½)
Six additional units of Biochemistry and Microbiology numbered 300 and above (6)	CHEM 245 (1½)	CHEM 245 (1½)
	BIOC 300 (3)	BIOC 300 (3)
	BIOC 301 (1½)	BIOC 301 (1½)
	MICR 301 (1½)	MICR 301 (1½)
	MICR 302 (1½)	MICR 302 (1½)
Nine units in a second area of concentration (9)	BIOC 380 or MICR 380 (0)	BIOC 380 or MICR 380 (0)
Other courses (12)	Other courses (4½)	Other courses (7½)
	Fourth Year	**Fourth Year**
	CHEM 335/337 or 345/346 (3)	CHEM 335/337 or 345/346 (3)
	Two of BIOC 401, 403, 404 or 405 (3)	Two of BIOC 401, 403, 404, or 405 (3)
	Two of MICR 401, 402, 403, 404, 405 or 407 (3)	Two of MICR 401, 402, 403, 404, 405 or 407 (3)
	BIOC 406 or MICR 406 (3)	BIOC 406 or MICR 406 (3)
	BIOC 480 or MICR 480 (1½)	BIOC 480 or MICR 480 (1½)
	Other courses (1½)	BIOC 499 or MICR 499 (3)
		Other courses (1½)

Other courses suggested:

ENGL 200 or higher level courses
A language at the 100 level or higher
MATH 233A, 233C
CSC 110, 115
CHEM 312, 318, 324, 338, 345, or 400 level courses
BIOL 203, 204, 206, 207, 300, 305A, 305B, or 400 level courses
PHYS 214, 215, 216, 217, 316, 317, or 325
BIOC 201

Notes

(1) Proficiency examinations in one or two modern languages are often required in graduate studies, and students planning graduate work are advised to elect one or two courses in French, German, Russian, or another modern language on Departmental recommendation.
(2) Courses may be taken in different sequences and in different years than indicated provided that the co- and prerequisite requirements are satisfied; the Department should be consulted.
(3) Directed studies courses are not available to be taken more than once and are normally only available to students with an overall grade point average of at least 3.50.
(4) Those students who wish to take CHEM 345 and 346 in the fourth year should take MATH 200/201 rather than STAT 250/251 (or BIOL 250/251) in the second year.
(5) Students should consult the Department concerning courses offered in a particular year.

BIOCHEMISTRY OR MICROBIOLOGY AND CHEMISTRY COMBINED MAJOR

Students wishing to obtain a combined major in Biochemistry or Microbiology and Chemistry should take the following program.

First Year

CHEM 100A, or 101B, or 140C	(1½)
CHEM 102, or 245D	(1½)
ENGL 121/122, or 115/116	(3)
MATH 100/101	(3)
Two of PHYS 110 (or 125)/120/220 or at least a grade of B in PHYS 102	(3)
Other courses (Electives; may include CHEM 231)	(3)

Second Year

BIOC 200	(1½)
BIOL 200	(1½)
CHEM 213/222/231/235/245	(7½ or 6*)
MATH 200	(1½)
MICR 200	(3)
Other courses (Electives)	(0 or 1½*)

Third Year

BIOC 300	(3)
BIOC 301	(1½)
BIOC 380 or MICR 380	(0)
CHEM 323/324/335/338/345/346	(9)
MICR 301/302	(3)

Fourth Year

Two of BIOC 401/403/404/405	(3)
BIOC 406 or MICR 406	(3)
BIOC 480 or MICR 480	(1½)
CHEM 312/433	(3)
CHEM 424 or other 400 level Chemistry course with permission of department	(1½)
Two of MICR 401/402/403/404/405/407	(3)

A For students with Chemistry 11 and Algebra 12 or Mathematics 12 or equivalents

B For students with Chemistry 12 and Algebra 12 or Mathematics 12 or equivalents

C For students with at least "B" standing in Chemistry 12 and Algebra 12

D For students with at least "B" standing in CHEM 140

* If CHEM 245 completed previously

HONOURS

Students who wish to be admitted to one of the Honours programs should apply to the Chair of the Department on completion of their second year. The general requirements for admission to the third year of the Honours program are specified above. Normally admission to the Honours program requires at least a second class average in each of the first two undergraduate years. The minimum requirement for admission to the fourth year is a second class average overall in the work of the third year.

A student in the Biochemistry or Microbiology Honours program is required to meet the general regulations of the University on pages 15 to 20 of this Calendar. If a student fails to meet the standards for the Honours degree, while meeting the Major degree requirements, the Department may recommend the appropriate class of Major degree.

DOUBLE HONOURS

University regulations also apply to students in a Double Honours program which includes Biochemistry or Microbiology; however as more than 30 units of upper level courses may be taken, the Department requires that, of the upper level courses in Biochemistry and Microbiology, 15 units must be included in the 30 units used to calculate the graduating average and these 15 units must include BIOC or MICR 380, 480, 499.

COOPERATIVE EDUCATION PROGRAM

The Cooperative Education Program in the Faculty of Arts and Science is described on page 36.

Entry into the Biochemistry and Microbiology Cooperative Program is restricted to students who are enrolled in an Honours or Major program offered by the Department. To qualify for entry and continuation in the Cooperative Program, students must be enrolled on a full time basis and must normally maintain a B average (4.50) in Biochemistry and Microbiology courses and overall. Students are also required to satisfactorily complete at least five Work Terms. The first Work Term, in the summer following the first academic year, is optional but the subsequent five scheduled Work Terms are required. Each Work Term will be recorded on the student's academic record and transcript (as COM, N, or F), and details of Work Terms are recorded on the Record of Work Terms which is attached to the student's academic record and transcript. A student may at any time transfer from the Biochemistry and Microbiology Cooperative Program to a regular Biochemistry and Microbiology program.

Applications and further information concerning the Cooperative Education Program in Biochemistry and Microbiology may be obtained from the Department.

UNDERGRADUATE COURSES

BIOCHEMISTRY

(Course offering codes: Y = Sept.-Apr., F = Sept.-Dec., S = Jan.-Apr., K = May-Aug., NO = Not offered, this session)

BIOC 200 (1½) INTRODUCTORY BIOCHEMISTRY
An introduction to the principles of Biochemistry. Properties of biomolecules, basic enzymology and metabolism. Bioenergetics, nucleic acid structure and synthesis. Protein synthesis. Structure and properties of membranes. (Note: BIOL 200 should be taken in the second term; see BIOL 200. (*Pre- or corequisite:* CHEM 231 or 230)
W.W. Kay, P.J. Romaniuk F(3-0)

BIOC 201 (1½) INTRODUCTION TO NUTRITIONAL BIOCHEMISTRY
This course will be oriented to students interested in a general understanding of man's nutritional needs and the food supplies and procedures available to meet them. Requirements for protein, carbohydrate, fat, vitamins and minerals will be discussed and related to cellular biochemical mechanisms. Energy balance, dieting and world food problems will also be considered.
J.T. Buckley NO(3-0)

BIOC 300 (3) GENERAL BIOCHEMISTRY
An intermediate course in Biochemistry. Protein structure, enzyme kinetics, bioenergetics and metabolism. Membrane structure and transport. Metabolic control systems. Synthesis of DNA and RNA, protein synthesis and morphogenesis. (*Prerequisites:* A grade of B- or higher in 200; BIOL 200; recommended *pre- or corequisite:* CHEM 213)
R.W. Olafson Y(3-0)

BIOC 301 (1½) BIOCHEMISTRY LABORATORY
An intermediate course in biochemical laboratory techniques. (*Prerequisite:* A grade of B- or higher in 200; BIOL 200; *pre- or corequisite:* 300) Y(0-3)

BIOC 380 (0) SEMINAR
Attendance and participation in either BIOC 380 or MICR 380 is required for students in the third year of the Major and Honours programs. Credit for attendance will not be given for both BIOC 380 and MICR 380. Attendance is recommended for students in their first and second years who plan to enter Major and Honours programs. (Grading: COM, N, or F.) Y(2-0)

BIOC 401 (1½) NUCLEIC ACIDS:
An advanced study of the structures and functions of RNA and DNA. Topics will include protein synthesis in prokaryotes and eukaryotes and the supramolecular organization of chromatin, ribosomes and viruses. (*Prerequisite:* 300, CHEM 213, or permission of the Department)
P.J. Romaniuk F(3-0)

BIOC 403 (formerly part of 402) (1½) LIPIDS AND MEMBRANES
The molecular properties of the various classes of lipids and glycolipids, as well as their biosynthesis and regulation, will be considered. The supramolecular structure, function and assembly of biological membranes will constitute the major content of the course. The course will consist of formal lectures in addition to required reading and brief seminars by the students. (*Prerequisites:* 300 and CHEM 213, or permission of the Department)
J.T. Buckley, W.W. Kay NO(3-0)

BIOC 404 (formerly part of 402) (1½) PROTEINS
Detailed examination of protein structure emphasizing techniques for isolation, characterization, chemical modification and synthesis of proteins and peptides. The course will consist of formal lectures in addition to required readings and brief seminars by the students. (*Prerequisites:* 300 and CHEM 213, or permission of the Department)
R.W. Olafson NO(3-0)

BIOC 405 (1½) MOLECULAR BIOTECHNOLOGY
A detailed consideration of recent advances in the molecular basis for biotechnology. The course consists of lectures with oral and written presentations by the students on selected topics. Attendance at seminars given by visiting speakers will be required. (*Prerequisites:* 300; MICR 200) (Credit will not be given for both 405 and MICR 405)
S. Misra S(3-0)

BIOC 406 (3) ADVANCED BIOCHEMISTRY LABORATORY
An advanced laboratory in biochemical and molecular biological techniques. (*Prerequisites:* A grade point average of at least 4.0 in 300, MICR 301, and MICR 302) (Credit will not be given for both 406 and MICR 406) Y(0-5)

BIOC 470 (1½ or 3) DIRECTED STUDIES IN BIOCHEMISTRY

BIOC 480 (1½) SEMINAR
Seminars are presented weekly by invited speakers, Department members and all students in the fourth year of the Major and Honours programs. Students are required to submit a literature research paper of up to 3,000 words as well as a condensed abstract and to deliver an oral presentation. Attendance and participation in either BIOC 480 or MICR 480 is required of all students. (Credit will not be given for both BIOC 480 and MICR 480.) Y(2-0)

BIOC 499 (3) UNDERGRADUATE THESIS
Research under the direction of a faculty member. Open to Honours students only. (Credit will not be given for both BIOC 499 and MICR 499.)

MICROBIOLOGY

MICR 200 (3) INTRODUCTORY MICROBIOLOGY
This course is designed to provide a broad introduction to the field of microbiology. Basic principles in the following areas will be covered: prokaryotic cell structure and function; physiology and growth of microorganisms with an emphasis on diversity; virology; microbial genetics; immunology; medical microbiology; applied microbiology; microbial ecology. (Degree credit will not normally be counted for both 101 and 200.) (*Prerequisite:* At least Second Year standing or written permission of the instructor)
T.J. Trust, E.E. Ishiguro Y(2-2)

MICR 301 (1½) INFECTION AND IMMUNITY
Consideration of pathogenic bacteria and viruses; mechanisms of pathogenicity; detailed examination of the major infectious diseases; the immune and allergic response. (*Prerequisite:* 200 or permission of the Department).
F.E. Nano S(2-3)

MICR 302 (1½) MICROBIAL GENETICS
Principles of bacterial and bacteriophage genetics. Mutagenesis and selection of mutants; genetic exchange mechanisms in microorganisms; genetic recombination; modern techniques for genetic mapping and for analyses of gene structure, function, and expression. (*Prerequisites:* 200 and BIOC 200; or written permission of instructor)
E.E. Ishiguro F(2-3)

MICR 380 (0) SEMINAR
Attendance and participation in either MICR 380 or BIOC 380 is required of students in the third year of the Major and Honours programs. Credit for attendance will not be given for both MICR 380 and BIOC 380. Attendance is recommended for students in their first and second years who plan to enter Major and Honours programs. (Grading: COM, N, or F) Y(2-0)

MICR 401 (formerly half of 400) (1½) MOLECULAR PHYSIOLOGY
An advanced consideration of the molecular aspects of microbial cell structure and growth. Emphasis will be given to the coordination of microbial catabolism, bioenergetics and biosynthesis and cell assembly. The course will consist of formal lectures with additional literature reading and brief seminars by students. (*Prerequisites:* 302 and BIOC 300, or permission of Department) F(3-0)

MICR 402 (formerly half of 400) (1½) VIROLOGY
An advanced consideration of molecular aspects of plant, animal and bacterial viruses with emphasis on structural morphogenesis and gene expression. The course consists of lectures with oral and written presentations by the students on selected topics. (*Prerequisite:* 200; *pre- or corequisite:* BIOC 300) NO(3-0)

MICR 403 (formerly half of 400) (1½) IMMUNOLOGY
The generation of antibody diversity; immune effector mechanisms and their regulation; immunological principles as applied to research and medicine. The course consists of lectures with oral and written presentations by the students on selected topics. Attendance at seminars given by visiting speakers will be required. (*Prerequisite:* 200)
T.W. Pearson S(3-0)

MICR 404 (1½) MOLECULAR PATHOGENICITY
A detailed consideration of recent advances in microbial pathogenesis. The course consists of lectures with oral and written presentations by the students on selected topics. Attendance at seminars given by visiting speakers will be required. (*Prerequisite:* 301, or permission of the instructor)
T.J. Trust NO(3-0)

MICR 405 (1½) MICROBIAL BIOTECHNOLOGY
A consideration of the application of microorganisms to biotechnology. The course consists of lectures with oral and written presentations by the students. Attendance at seminars given by visiting speakers will be required. (*Prerequisites:* 200, BIOC 300) (Credit will not be given for both 405 and BIOC 405)
S. Misra NO(3-0)

MICR 406 (3) ADVANCED MICROBIOLOGY LABORATORY
An advanced laboratory in microbiological and molecular biological techniques. (*Prerequisites:* A grade point average of at least 4.0 in 301, 302, and BIOC 300) (Credit will not be given for both 406 and BIOC 406) Y(0-5)

MICR 407 (1½) MOLECULAR MICROBIOLOGY
Selected topics in the molecular aspects of Microbiology. May be taken more than once in different topics to a maximum of 6 units.
T.J. Trust, E.E. Ishiguro NO(3-0)

MICR 470 (1½ or 3) DIRECTED STUDIES IN MICROBIOLOGY

MICR 480 (1½) SEMINAR
Seminars are presented weekly by invited speakers, Department members and all students in the fourth year of the Major and Honours programs. Students are required to submit a literature research paper of up to 3,000 words as well as a condensed abstract and to deliver an oral presentation. Attendance and participation in either BIOC 480 or MICR 480 is required of all students. (Credit will not be given for both BIOC 480 and MICR 480.) Y (2-0)

MICR 499 (3) UNDERGRADUATE THESIS
Research under the direction of a faculty member. Open to Honours students only. (Credit will not be given for both BIOC 499 and MICR 499.)

DEPARTMENT OF BIOLOGY

Louis A. Hobson, B.S. (Humboldt St. Coll.), M.S., Ph.D. (Wash.), Associate Professor and Chair of the Department
Michael J. Ashwood-Smith, B.Sc., M.Sc. (Durh.), Ph.D. (Lond.), Professor
Robert D. Burke, B.Sc., Ph.D. (Alta.), Professor
Derek V. Ellis, B.Sc. (Edin.), M.Sc., Ph.D. (McG.), Professor
Arthur R. Fontaine, B.Sc. (McGill), D.Phil. (Oxon.), Professor

Barry W. Glickman, B.Sc., M.Sc. (McG.), Ph.D. (Leiden), Professor
Patrick T. Gregory, B.Sc. (Tor.), M.Sc., Ph.D. (Man.), Professor
George O. Mackie, B.A., M.A., D.Phil. (Oxon.), F.R.S.C., Professor
John N. Owens, B.S. (Portland St.), M.Sc., Ph.D. (Ore. St.), Professor
Robert G.B. Reid, B.Sc., Ph.D. (Glas.), Professor
Richard A. Ring, B.Sc., Ph.D. (Glas.), Professor
Nancy M. Sherwood, B.S. (Ore.), M.A., Ph.D. (Calif. — Berk.), Professor
Geraldine A. Allen, B.Sc., M.Sc. (Brit. Col.), Ph.D. (Ore. St.), Associate Professor and Curator of the Herbarium
Alan P. Austin, B.Sc., Ph.D. (Wales), Associate Professor
David J. Ballantyne, B.Com. (Brit. Col.), M.S. (Wash. St.), Ph.D. (Maryland), Associate Professor
Marcus A.M. Bell, B.S.F. (Brit. Col.), M.F. (Yale), Ph.D. (Brit. Col.), R.P.F., Associate Professor
Jack L. Littlepage, B.A. (San Diego St. Coll.), Ph.D. (Stan.), Associate Professor
John E. McInerney, B.Sc. (Ott.), M.Sc., Ph.D. (Brit. Col.), Associate Professor
Miles Paul, A.B. (Harv.), Dip. in Educ. (Mak.), Ph.D. (Stan.), Associate Professor
E. Derek Styles, B.S.A. (Brit. Col.), Ph.D. (Wis.), Associate Professor
Verena J. Tunnicliffe, B.Sc. (McM.), M.Phil., Ph.D. (Yale), Associate Professor
Barbara J. Hawkins, B.S.F. (Brit. Col.), Ph.D. (Cant.), Assistant Professor
Nigel J. Livingston, B.Sc. (Nott.), M.Sc. (Guelph), Ph.D. (Brit. Col.), Assistant Professor
Patrick von Aderkas, B.Sc. (Guelph), Ph.D. (Manc.), Assistant Professor
Hamish D.W. Bridgman, C.D., B.Sc. (U. of Vic.), B.A., M.A. (Cantab.), Administrative Officer.
A. Cathryn Corbett, B.Sc. (U. of Vic.), M.Sc. (Ore.), Cooperative Education Coordinator
Hans (Jack) F. Dietrich, Senior Scientific Assistant.
Yousuf A. Ebrahim, M.Sc. (York), Senior Laboratory Instructor
Anne Garden, B.Sc. (Sask.), M.Sc. (Calg.), Senior Laboratory Instructor
Beverley L. Glover, B.Sc. (U. of Vic.), M.Sc. (Guelph), Senior Laboratory Instructor
Thomas A. Gore, Senior Scientific Assistant
Donal N. Horn, Master, Marine Sciences Vessel
Anne Parkinson, B.Sc., M.Sc. (U. of Vic.), Cooperative Education Coordinator
G. Beth Stevenson, B.A., M.A. (Brit. Col.), Senior Laboratory Instructor
Ian G. Thornton, B.Sc., M.Sc. (U. of Vic.), Senior Laboratory Instructor
Neville Winchester, B.Sc., M.Sc. (U. of Vic.), Senior Laboratory Instructor

Visiting and Adjunct Appointments:

Arthur T. Bergerud, B.Sc. (Ore. St.), M.Sc. (Wis.), Ph.D. (Brit. Col.), Adjunct Professor (1990-91)
Ralph O. Brinkhurst, B.Sc., Ph.D., D.Sc. (Lond.), Adjunct Professor (1990-92)
Bob Kuijt, B.A. (Brit. Col.), M.A., Ph.D. (Calif.-Berk.), Adjunct Professor (1989-91)
Alan J. Lupin, M.B.B.S. (Lond.), F.R.C.S., Adjunct Professor (1990-92)
Jack R. Sutherland, B.Sc., M.Sc. (Ohio), Ph.D. (W. Virg.), Adjunct Professor (1990-92)
Robert Van Den Driessche, B.Sc. (N. Wales), M.Sc.(Tor.), Ph.D. (Wales), Adjunct Professor (1989-91)
Hugh J. Barclay, B.Sc. (Brit. Col.), M.Sc., Ph.D. (U. of Vic.), Adjunct Associate Professor (1990-92)
Donald S. Eastman, B.Sc. (Brit. Col.), M.Sc. (Aberd.), Ph.D. (Brit. Col.), Adjunct Associate Professor (1989-91)
Abul K. Ekramoddoullah, B.Sc., M.Sc. (Dhaka), Ph.D., (McG), Adjunct Associate Professor (1990-92)
Richard J. Hebda, B.Sc. (McM.), Ph.D. (Brit. Col.), Adjunct Associate Professor (1989-91)
David L. Mackas, B.S. (Wash.), Ph.D. (Dal.), Adjunct Associate Professor (1990-92)
Edward H. Miller, B.Sc. (Alta.), M.Sc. (Cantab.), Ph.D. (Dal.), Adjunct Associate Professor (1990-92)
Imre S. Otvos, B.S.F. (Brit. Col.), M.S., Ph.D. (Calif., Berk.), Adjunct Associate Professor (1990-91)
Dorothy H. Paul, B.A. (Radcliffe), D.E.S. (Marseille), Ph.D. (Stan.), Adjunct Associate Professor (1990-92)
George S. Puritch, B.Sc. (U. of Vic.), M.S. (Mass.), Ph.D. (Aberd.), Adjunct Associate Professor (1989-91)
Thomas E. Reimchen, B.Sc. (Alta.), Ph.D. (Liv.), Adjunct Associate Professor (1990-92)
Joseph A. Antos, B.S. (N. Ill.), M.A. (Mon.), Ph.D. (Ore. St.), Adjunct Assistant Professor (1989-91)
Alan E. Burger, B.Sc., B.Sc., Ph.D. (Cape T.), Adjunct Assistant Professor (1989-91)
Craig W. Hawryshyn, B.Sc. (Man.), M.Sc. (Alta.), Ph.D. (Wat.), Adjunct Assistant Professor; University Research Fellow (1989-91)
William A. Joyce, B.S. (Corn.), Visiting Assistant Professor (1990-91)
John N. King, B.Sc. (Alta.), M.Phil. (Edin.), Ph.D. (Alta.), Adjunct Assistant Professor (1990-92)
Johannes P. Van Netten, B.Sc., Ph.D. (U. of Vic.), Adjunct Assistant Professor (1990-92)
Eleanor White, B.Sc., M.Sc. (Brit. Col.), Ph.D. (Swedish U. of Agric. Sci.), Adjunct Assistant Professor (1990-92)

GRADUATE PROGRAMS

For information on studies leading to the M.Sc. and Ph.D. degrees, see page 239.

GENERAL, MAJOR AND HONOURS PROGRAMS

Students have the opportunity to study biology at any of three levels of concentration, General, Major or Honours. B.Sc. Honours and Major programs are intended for those planning to become professional biologists. Both require a core of biology courses, corequisite courses in the other sciences and a selection of upper level courses suited to the interests of individual students. The Honours program requires undergraduates to undertake a research project including the writing and defence of an Honours thesis. Students intending to pursue research or continue their studies for M.Sc. or Ph.D. degrees should consider the Honours program. The distinctive character of B.Sc. or B.A. General programs is the breadth of course options possible. Students in these programs may wish to combine a concentration in Biology with one in another science area (B.Sc.) or an Arts area (B.A.). Such interdisciplinary programs may be advantageous to students considering a postgraduate degree in the health sciences or education.

COOPERATIVE EDUCATION PROGRAM

Biology students registered in Major and Honours programs may wish to combine their academic programs with relevant and productive work experience in industry, business and government. The general concept and requirements of the Cooperative Education Program are given on page 29 and specifics for the Faculty of Arts and Science are described on page 32.

Entry to the Biology Cooperative Program is restricted to students enrolled in an Honours or Major program in Biology and attending the University on a full time basis. To qualify for entry and continuation in the Cooperative Program a student must normally maintain a second class average in Biology courses and overall. In addition to academic grades, acceptance will also be based upon individual interest, abilities and aptitudes, and a formal interview. A student is required to complete satisfactorily at least four Work Terms, each of which will be recorded on the student's academic record and transcript (as COM, N or F). Details of Work Terms are recorded on the Record of Work Terms which is attached to the student's academic record and transcript. The first Work Term (following first year) is optional, but students are required to complete four of the following five scheduled Work Terms. A student may at any time transfer from the Biology Cooperative Program to a regular Biology Program.

Students transferring from other postsecondary institutions may apply to enter the Coop Program when applying for admission to the University of Victoria. The Biology Department does not normally permit students to gain credit by Work Term Challenge. Coop students interrupting their academic or Work Term program may apply for reinstatement in the Coop Program upon return to the University.

Readmission is not guaranteed.

Applications and further information concerning the Cooperative Program in Biology may be obtained from the Department.

BIOLOGY PROGRAMS

B.Sc. HONOURS

Core

BIOL 150A/B	(3)
BIOL 200	(1½)
BIOL 203/204	(3)
BIOL 206/207	(3)
BIOL 251 (304, or STAT 251)	(1½)
BIOL 300/306	(3)
One of BIOL 309 or 343	(1½)
One of BIOL 305A/B or 331A/B	(3)
BIOL 455 or BIOL 400	(1½)
BIOL 460	(1)
BIOL 499	(3)
TOTAL	(25)
Minimum of 12 upper level Biology units chosen to complete program	(12)
Minumum no. of Biology units	(37)

Corequisites

Honours students must complete 18 units of corequisites chosen from the list of approved corequisites below.

Program must contain:	
BIOC 200	(1½)
STAT 250	(1½)
Not less than 6 units of CHEM incl. 3 units of organic CHEM	(6)
Not less than 3 units of PHYS	(3)
Not less than 3 units of MATH & C SC	(3)
3 additional units from the list of Approved Corequisites	(3)
TOTAL	(18)
Free Electives	**(6)**
TOTAL UNITS	(61)

B.Sc. MAJOR

Core

BIOL 150A/B	(3)
BIOL 200	(1½)
BIOL 203/204	(3)
BIOL 206/207	(3)
BIOL 251 (304, or STAT 251)	(1½)
BIOL 300/306	(3)
BIOL 309 or 343	(1½)
One of BIOL 305A/B or 331A/B	(3)
BIOL 455, or 400	(1½)
TOTAL	(21)
Plus a minimum of 6 upper level Biology units chosen to complete program	(6)
Minimum no. of Biology units	

Corequisites

Major students must complete 18 units of corequisites chosen from the list of approved corequisites below.

Program must contain:	
BIOC 200	(1½)
STAT 250	(1½)
Not less than 6 units of CHEM incl. 3 units of organic CHEM	(6)
Not less than 3 units of PHYS	(3)
Not less than 3 units of MATH & C SC	(3)
3 additional units from the list of Approved Corequisites	(3)
TOTAL	(18)
Free Electives	**(15)**
TOTAL UNITS	(60)

Approved Corequisite Courses: Students should obtain advice in selecting appropriate corequisite courses. They should also check individual Departmental Calendar entries for prerequisites.

MICR 200	GEOL 100	PHYS 102
BIOC 300	GEOL 201	PHYS 100
CHEM 100	CSC 110	PHYS 110
CHEM 101	CSC 112	PHYS 120
CHEM 102	CSC 115	PHYS 210
CHEM 140	CSC 160	PHYS 214
CHEM 213	CSC 200	PHYS 215
CHEM 231	MATH 100	PHYS 216
CHEM 232	MATH 101	PHYS 217
CHEM 235	MATH 102	PHYS 220
CHEM 245	MATH 151	
	STAT 251	

B.Sc. GENERAL

BIOL 150A/B	(3)
6 units of 200 level Biology courses	(6)
9 units of acceptable Biology courses numbered 300 and above	(9)
BIOL units	(18)

B.A. GENERAL

BIOL 150A/B	(3)
6 units of 200 level Biology courses	(6)
9 units of acceptable Biology courses numbered 300 and above	(9)
BIOL units	(18)

Corequisites

Any combination of PHYS 100, 110, 120, 220 or 102	(3)	CHEM 100/102, 101/ 102 or 140/245	(3)
CHEM 100/102, 101/ 102 or 140/245	(3)		
MATH 100/101 or 102/151 or equivalent	(3)		

The following table outlines a suggested timetable for Honours, Major and General Programs in Dept. of Biology. Students are encouraged to seek advice from Biol. Dept. advisers. The electives referred to consist of free electives, BIOL corequisites, and courses from the list of Approved Corequisite Courses, above.

Honours		Major		General	
First year		**First year**		**First year**	
BIOL 150A/B	(3)	BIOL 150A/B	(3)	BIOL 150A/B	(3)
CHEM Coreq.	(3)	CHEM Coreq.	(3)	CHEM 100/102, 101/102 or 140/245	(3)
PHYS	(3)	PHYS	(3)	Electives	(9)
MATH Coreq.	(3)	MATH Coreq.	(3)		(15)
Electives	(3)	Electives	(3)		
	(15)		(15)		
Second year		**Second year**		**Second year**	
BIOC 200/ BIOL 200	(3)	BIOC 200/ BIOL 200	(3)	BIOL 203/204	(3)
BIOL 203/204	(3)	BIOL 203/204	(3)	BIOL 206/207	(3)
BIOL 206/207	(3)	BIOL 206/207	(3)	Electives	(9)
CHEM Coreq.	(3)	CHEM Coreq.	(3)		(15)
STAT 250/ BIOL 251	(3)	STAT 250 BIOL 251	(3)		
	(15)		(15)		
Third year		**Third year**		**Third year**	
BIOL 300/306	(3)	BIOL 300/306	(3)	300 level BIOL courses with above	(9)
BIOL 305A/B or 331A/B	(3)	BIOL 305A/B or 331A/B	(3)		(15)
BIOL 309 BIOL 309 or 343	(1½)	Electives	(6)		
Electives	(4½)	or 343	(1½)		
Language	(3)	Electives	(7½)		
	(15)		(15)		
Fourth year		**Fourth year**			
BIOL 455 or 400	(1½)	BIOL 455 or 400	(1½)		
BIOL 460	(1)				
BIOL 499	(3)				
Electives	(10½)	Electives	(13½)		
	(16)		(15)		

Departmental Advisers:

Geraldine A. Allen	—	Plant Systematics, Plant Ecology, Evolution
Michael J. Ashwood -Smith	—	Toxicology
Alan P. Austin	—	Aquaculture, Algae, Environment
David J. Ballantyne	—	Plant Physiology
Marcus A.M. Bell	—	Ecology, Botany
Robert D. Burke	—	Developmental Biology, Cell Biology
Derek V. Ellis	—	Marine Environmental Science, Behaviour, Taxonomy, Biology Cooperative Education Program
Arthur R. Fontaine	—	Marine Biology, Invertebrate Functional Morphology
Patrick T. Gregory	—	Terrestrial Animal Ecology, Herpetology
Barbara J. Hawkins	—	Plant Physiology
Craig W. Hawryshyn	—	Vertebrae Zoology, Neurobiology, Fish Biology
John S. Hayward	—	Environmental Physiology, Comparative Animal Physiology
Louis A. Hobson	—	Oceanography, Algal Physiology
Jack L. Littlepage	—	Oceanography, Plankton Biology
Nigel J. Livingston	—	Plant Physiology
George O. Mackie	—	Neurobiology
John E. McInerney	—	Vertebrate Zoology, Biology of Fishes

John N. Owens — Botany, Forest Biology
John W. Paden — Mycology, Plant Pathology
Miles Paul — Developmental Biology
Robert G.B. Reid — Physiology of Marine Invertebrates
Richard A. Ring — Entomology
Nancy M. Sherwood — Neurobiology, Animal Physiology
E. Derek Styles — Genetics
Verena Tunnicliffe — Ecology, Marine Biology, Evolution

NOTES

BIOL 150A and B or equivalent are normally prerequisite to all courses for Major and Honours Programs in the Department unless otherwise stated in course descriptions. However, students who have credit for Biology 11 and 12 or who have passed BIOL 101 with a grade of B+ or better may enroll in courses for which 150A and B are prerequisite. Students having credit only in Biology 11 and intending to major in Biology should take 150A and B. Students having only Biology 11 may, under special circumstances, bypass 150A and B with permission from the Biology Department. Counselling on this matter may be obtained from Biology Department advisers.

Students who bypass 150A and B should take two courses selected from 203, 204, 206, and 207 in their first year and, in their second year, the remaining two of these courses plus 300 and 306. They must choose an additional three units of upper level BIOL electives to be taken in their third or fourth year.

Students considering going on to professional schools, e.g. Medicine, Dentistry, Veterinary Science, etc. should include those Science, Math and English courses prerequisite to entry into professional school. Three units of Physics are required for most first year preprofessional programs (Medicine, Optometry, Pharmacy, Home Economics (Nutrition) and Forestry). Intending professional students are advised to include 3 units of Physics in their first year program.

Biology students contemplating entry into medicine after the third year should consult with the Department.

Students considering a teaching career are advised to consider the following programs: for Senior Secondary level, a B.Sc. Combined Major or Honours program in two subject areas and including both Animal (305A&B) and Plant (331A&B) Physiology; Junior Secondary School and Elementary level, a B.Sc. or B.A. General program. Details of post-graduate requirements for teacher certification (e.g. professional year program) are given under the Faculty of Education.

Students taking the BIOC 200 (1½) and BIOL 200 (1½) sequence of courses may count 1½ units for BIOC 200 towards the minimum of units of 200 level Biology required for a B.Sc. General or B.A. General degree.

Because of the importance of biometrics in most biological work, students in biology programs may want to consider taking additional statistics courses as electives. It is recommended that students take at least MATH 233A, STAT 253, 354, and 453, in addition to required courses. Additional suggestions are MATH 233B, STAT 350/351 and 454. Note that STAT 350/351 would require the student to take MATH 100/101 instead of MATH 102/151 as required courses, and also MATH 200/201. Students are further advised to take courses in Computer Science as early as possible; C SC 200 is recommended. Students taking BIOL 251 (formerly 304) instead of STAT 251 may be admitted, with permission, to upper level statistics courses, but STAT 251 is advised for students planning to take such courses.

Students may be required to meet part of the expenses involved in required field trips.

HONOURS

Honours students should complete the program of required courses and Biology electives as described for the Major, and in addition should take 460 (1) and 499 (3) in their fourth year. Of the remaining 9 units to complete the 61 unit degree requirement, at least 3 units must be from additional course(s) in Biology chosen in consultation with the Department.

Prospective Honours students should first discuss their proposed thesis research with a faculty member and obtain the member's consent to serve as thesis supervisor. They should then apply in writing to the Chair of the Department for admission to the Honours program before May 1 in the third year of studies. However, under special circumstances applications will be accepted up to the end of fall registration in the fourth year of studies. The completed thesis will be examined by a small committee including the supervisor. Applicants should have and maintain a grade point average of at least 6.00 in all Department courses.

First Class Honours will be awarded to students obtaining a first class average in 300 and 400 level courses, and must include first class standing in 499. Second Class Honours will be awarded to students obtaining a second class average in 300 and 400 level courses, and must include at least second class standing in 499. A student who obtains a first class average in the 300 and 400 level courses but second class standing in 499 will have the option of receiving a B.Sc. with a First Class Major in Biology or Second Class Honours. A student who achieves lower than second class standing in 499 will graduate under the Major program provided the student satisfies other requirements for the degree.

The submission date for the thesis is the last day of lectures.

Proficiency in more than one language is often required in graduate studies. Students planning graduate work are encouraged to elect one or two language courses.

BIOLOGY COURSES FOR NONBIOLOGISTS

The Biology Department offers several courses for students not undertaking an undergraduate program in Biology. These courses cover areas of Biology of general interest and relevance. BIOL 101 is a course of broad scope that may serve as useful preparation to the other courses. Courses in this category include 101, 310, 313, 320, 334, 338 and 400. Certain other courses may be taken with permission of instructor.

UNDERGRADUATE COURSES

BIOLOGY

Students should consult the Department concerning courses offered in a particular year.

NOTE: 150A and B or equivalent are normally prerequisite to all other courses in the Department except where otherwise stated. For information concerning acceptable equivalents see Notes, page 47.

(Course offering codes: Y = Sept.-Apr., F = Sept.-Dec., S = Jan.-Apr., K = May-Aug., NO = Not offered, this session)

BIOL 101 (3) BIOLOGY AND CONTEMPORARY ISSUES
Biological principles viewed from the human perspective emphasizing current development of significance to individuals and society. Topics range over relevant aspects of cell biology, genetics, development, behaviour, evolution, ecology, applied biology and human biology. Guest speakers from the professional community outside the department of Biology contribute significantly to the presentations. Laboratory/tutorials complement lecture material and include some practical experience, demonstrations, field trips and student projects.
(This course is not intended for Biology Majors; see Notes p. 47)

BIOL 150A (1½) (formerly half of 150) MODERN BIOLOGY
An introduction to biological science, emphasizing the diversity of living organisms and the ecological and evolutionary principles underlying this diversity. Major plant and animal groups are surveyed. This course is designed primarily for those intending to make the biological sciences a major area of study. (150A and 150B may be taken in any order) (See notes, page 47)
Members of the Department F(3-3)

BIOL 150B (1½) (formerly half of 150) MODERN BIOLOGY
An introduction to biological science, emphasizing cellular and physiological processes. Topics include principles of genetics, cell biology, plant physiology and animal physiology. This course is designed primarily for those intending to make the biological sciences a major area of study. (150A and 150B may be taken in any order) (See notes, page 47)
Members of the Department S(3-3)

BIOL 200 (1½) INTRODUCTION TO CELL STRUCTURE AND FUNCTION
Evolution of the cell; how cells are studied; the plasma membrane; cell-cell adhesion; extracellular matrix; synthesis of macromolecules;

the nucleus; mitochondria; chloroplasts; cytoskeleton; cell movement; cell growth; germ cells; fertilization; differentiation; chemical signalling; intracellular regulatory processes; immune system. (See BIOC 200) (*Pre- or corequisites:* CHEM 231 or 230 or 233. *Prerequisite:* BIOC 200 or permission of the instructor)
M. Paul S(3-3)

BIOL 203 (1½) NONVASCULAR PLANTS
The biology of algae, fungi, lichens and bryophytes will be studied, including discussions of their origins, evolution, ecology, physiology and economic uses. Laboratories will include examination of plants from our local flora whenever possible and field trips will be arranged.
L.A. Hobson & Members of the Department F(3-3)

BIOL 204 (1½) VASCULAR PLANTS
A survey of the vascular plants including ferns and fern allies, conifers and other gymnosperms, and flowering plants. Cell structure and tissues of vascular plants will be discussed as they relate to plant function. The origin and evolution of plant structures and groups making up the metaphyta will be emphasized. Laboratory studies will emphasize local plants and field trips will be arranged.
P. von Aderkas, B. J. Hawkins S(3-3)

BIOL 206 (1½) INVERTEBRATE ZOOLOGY
Survey of invertebrate animals, including taxonomy, morphology, life histories and phylogeny.
A.R. Fontaine F(3-3)

BIOL 207 (1½) CHORDATE ZOOLOGY
A survey of chordate diversity in an evolutionary perspective. Emphasis is on the comparative morphology of organ systems. Laboratory work involves dissections of representative specimens, and a term report is required.
N.M. Sherwood, P.T. Gregory S(3-3)

BIOL 250 (1½) BIOMETRICS
Elementary statistics for biology students. Topics include variables and frequency distributions, probability, sample statistics and confidence limits, hypothesis testing, two sample tests, introduction to chi-square tests. Weekly exercises in laboratory classes; take home problem sets also assigned. (NOTE: Credit cannot be obtained for both STAT 250 and BIOL 250) (See Credit Limit, page 15) NO(2-3)

BIOL 251 (formerly 304) (1½, formerly 3) BIOMETRICS
Introduction to experimental design, sampling, and data analysis for biologists. Topics include chi-square analyses, analysis of variance designs, regression and correlation, and nonparametric tests; the course deals mainly with univariate statistics, but multivariate methods are discussed briefly. Laboratory classes include tutorials and projects involving planning and carrying out surveys or experiments designed to test specific hypotheses; take home problem sets are also assigned. (*Prerequisite:* 250 or STAT 250) (Credit cannot be obtained for both STAT 251 and BIOL 251) (See Credit Limit, page 15)
P.T. Gregory S(2-3-1)

BIOL 300 (1½) GENETICS
Nature and function of the genetic material. Reproduction and heredity in eukaryotes and prokaryotes. Classical concept of the gene. Genetic control of biochemical reactions, differentiation and development. Population genetics and evolutionary mechanisms. (Students are strongly advised to delay taking 300 until they have successfully completed 200, Cell Biology.) (*Pre-or corequisite:* 200.)
E.D. Styles S(3-3)

BIOL 301A (1½) (formerly half of 301) INVERTEBRATE ADAPTATIONS
An advanced course emphasizing adaptations of invertebrates and principles of functional morphology. The lectures are organized in functional blocks, such as; feeding and nutrition, respiration, excretion, behaviour, coordination and reproduction. Taxonomy is not emphasized. Laboratory exercises include introduction to techniques, individual projects in functional morphology, and surveys of adaptive radiation of major invertebrate groups. (Students are required to participate fully in field trips) (*Prerequisite:* 206)
A.R. Fontaine F(2-3)

BIOL 301B (1½) (formerly half of 301) INVERTEBRATE ADAPTATIONS
An advanced course emphasizing adaptation of invertebrates and principles of functional morphology. The lectures are organized in functional blocks, such as: feeding and nutrition, respiration, excretion, behaviour, coordination and reproduction. Taxonomy is not emphasized. Laboratory exercises include introduction to techniques, individual projects in functional morphology, and surveys of adaptive radiation of major invertebrate groups. (Students are required to participate fully in field trips) (*Prerequisite:* 206)
A.R. Fontaine S(2-3)

BIOL 305A (1½) (formerly half of 305) ANIMAL PHYSIOLOGY
An evolutionary survey of animal function. The following systems will be examined comparatively: energetic and thermoregulatory, neuromuscular, endocrine, and circulatory. Laboratory includes study of live animals. (*Prerequisites:* 200, 206 and 207 or permission of instructor) (305A and 305B may be taken in any order)
N. M. Sherwood S(2-3)

BIOL 305B (1½) (formerly half of 305) ANIMAL PHYSIOLOGY
An evolutionary survey of animal function. The following systems will be examined comparatively: nutritional, digestive, respiratory, osmoregulatory and excretory. Laboratory includes study of live animals. (*Prerequisites:* 200, 206 and 207 or permission of instructor) (305A and 305B may be taken in any order)
R.G.B. Reid F(2-3)

BIOL 306 (ES 310) (1½) ECOLOGY
A survey of populations, communities, ecosystems, and the general principles of ecology. Laboratories will deal with both field and experimental aspects of ecology. Simple statistical techniques and computer packages will be used. (Biology honours and major students should take this course in conjunction with 300.) (*Prerequisite:* 250 or STAT 250 or equivalent; 251 or STAT 251 recommended)
P.T. Gregory, N. J. Livingston, D. V. Ellis, J. A. Antos F(2-3-1)

BIOL 308 (1½) ANIMAL HISTOLOGY
Lectures and laboratories will explore the fundamentals of animal tissues and cellular structure. Tissue specializations of major vertebrate organ systems will be examined and comparisons made throughout the animal kingdom. Students will gain experience in recognizing and describing various tissues and be exposed to the analysis of structure and function relationships (Major and Honours students are advised to take this course together with 309, 305A and/or 305B. Credit will not be given for this course and 302.)
R.D. Burke S(3-3)

BIOL 309 (1½) DEVELOPMENTAL ZOOLOGY
Animal development and the mechanisms that control it. Introductory embryology of vertebrates and invertebrates will be coordinated with the analysis of developmental processes. Topics considered will include gametogenesis, fertilization, cleavage, embryogenesis, organogenesis, cellular differentiation, growth, metamorphosis, regeneration. (*Prerequisites:* 200, 206 and 207 or permission of the instructor)
M. Paul F(2-3)

BIOL 310 (3) ELEMENTS OF OCEANOGRAPHY
A nontechnical course designed to give the general student a broad background in oceanography. Lectures will cover origin and extent of the oceans, nature of the sea bottom, causes and effects of tides, waves and currents, animal and plant life in the sea, pollution and utilization of the oceans by man. (Open to all students in second, third and fourth year. 150 A/B is not required for this course. Credit for this course will not be counted toward degree programs in Biology. Students planning to proceed to other courses in Oceanography must take 311A and 311B. Credit will not be given for both 310 and 311A or 311B.) NO(3-0)

BIOL 311A (1½) (formerly half of 311) AN INTRODUCTION TO PHYSICAL AND GEOLOGICAL OCEANOGRAPHY
This course provides an introduction to atmospheric and oceanic heat budgets, distributions of temperature, salinity and density in the oceans, ocean circulation, ocean waves, interactions between waves and coastal margins and the structure and evolution of sea floors. (Lectures will be

supplemented by laboratory experience. Participation in one single-day cruise is expected.) (Credit will not be given for both 310 and 311A.) (*Prerequisites:* Third year or higher standing; two of PHYS 100, 110, 120, and 220; MATH 100/101 or 102/151)
J.L. Littlepage
F (2-3)

BIOL 311B (1½) (formerly half of 311) AN INTRODUCTION TO CHEMICAL AND BIOLOGICAL OCEANOGRAPHY
This course provides an introduction to the effects of geological and biological processes on the chemical composition of seawater and to the dynamics of phytoplankton and zooplankton populations in the sea based on their ecological, physiological and behavioural characteristics. (Lectures will be supplemented by laboratory experience. Participation in two single-day cruises is expected.) (Credit will not be given for both 310 and 311B.) (*Prerequisites:* third year or higher standing; 311A, 203 and 206; CHEM 100/102 or 101/102 or 140/145)
J.L. Littlepage
S(2-3)

BIOL 312 (1½) INTRODUCTORY ENTOMOLOGY
An introduction to the morphology, physiology, taxonomy and biology of insects, and some consideration of their economic importance. A term essay and a representative collection of 75 species of insects will be required before completion of the course. The specimens should be mounted, identified and presented as a museum collection. Obtain instructions in the summer preceding the course. Field collecting trips will be arranged wherever possible. (Students proceeding in Entomology are advised to take this course in conjunction with 313.) (*Pre-or corequisite:* 206) Text: Borror, Tripplehorn and Johnson, *An Introduction to the Study of Insects.* 6th ed. (1989)
R.A. Ring
F(2-3)

BIOL 313 (1½) ECONOMIC ENTOMOLOGY
A study of our greatest competitors for food and resources. Insects and arachnids of medical, household, stored products, horticultural, agricultural and forestry importance will be discussed. The course will deal to a great extent with the variety of measures available for pest control. (*Prerequisite:* 150 or written permission of instructor) Texts: Assigned readings
R.A. Ring
F(2-2)

BIOL 314A (1½) (formerly half of 314) MARINE FIELD BIOLOGY
Introduction to methods and concepts of marine biological investigation. Description and comparison of species associations, spatial and temporal distribution patterns, food networks, species life strategies and assessment of environmental impact. Field emphasis will be on rocky shore and algal forest ecosystems. The laboratory will emphasize accuracy in species identification. (*Prerequisite:* 206. *Pre-or corequisites:* 306, 203) Text: Carefoot, T., *Pacific Seashores*
D.V. Ellis
NO(2-3)

BIOL 314B (1½) (formerly half of 314) MARINE FIELD BIOLOGY
Introduction to methods and concepts of marine biological investigation. Description and comparison of species associations, spatial and temporal distribution patterns, food networks, species life strategies and assessment of environmental impact. Field emphasis will be on beach and infaunal ecosystems. The laboratory will emphasize quantitative procedures, sampling design and numerical analysis. (Students will operate an IBM PC. Instructional sessions will be arranged during the 2nd and 3rd weeks of the course). (*Prerequisite:* 206. *Pre-or corequisites:* 306, 250 or STAT 250)
D.V. Ellis
NO(3-0)

BIOL 317 (1½) INTRODUCTION TO PLANT PATHOLOGY
An introduction to current principles and practice of plant and forest pathology; diseases incited by bacteria, fungi, viruses, nematodes, and physiological factors will be presented and discussed. Mechanisms of infection, disease development, host-parasite relations, and disease spread will be considered. Control practices including chemical and biological control, exclusion, and host resistance will be discussed. Laboratories to consist of isolation and identification of pathogens, innoculation and observation of disease development. Field trips to Federal and Provincial laboratories and selected field sites are required. (*Prerequisites:* 200, 203/204, CHEM 231 or 232 or 235; 331 A and B are recommended) (To alternate with 416)
T.B.A.
S(2-3)

BIOL 318 (1½) SYSTEMATICS OF FLOWERING PLANTS
An introduction to systematics of angiosperms; classification; identification; rules of nomenclature; the major groups of flowering plants; species concepts and speciation; experimental approaches to systematics, with examples from selected groups. (NOTE: A well prepared collection of 25 properly identified plants must be submitted for completion of the course. Students are urged to make their collections during the preceding summer. Contact the instructor for details and collecting equipment as early as possible.) (*Prerequisite:* 204 or written permission of the instructor; 300 recommended)
G.A. Allen
S(2-3)

BIOL 320 (1½) GENETICS AND EVOLUTION
Concepts of evolution and genetics that are of particular interest to present day society. The origin of life; evolutionary forces; genetic systems; gene environment interactions; human genetics; genetics and humans. Demonstration lessons will be arranged. (Open to non-Biology and general program Biology students. Biology honours and major students should register for 300. Credit will not be given for both 300 and 320.) (*Prerequisites:* At least second year standing with an introductory course in Biology or written permission of instructor)
E.D. Styles
F(3-0)

BIOL 329 (1½) BIOLOGY OF THE VERTEBRATES
The course consists of two sections. The first introduces principles of systematics and evolution, using vertebrates as examples. The second introduces principles of wildlife management. Considerable outside reading is required and class discussions are held regularly. Laboratory classes emphasize identification of native vertebrate species of British Columbia and introduce techniques of specimen preparation. Field trips are taken when possible. (*Prerequisites:* 207 or written permission of Department)
T.B.A.
F(2-3)

BIOL 331A (1½) (formerly half of 331) PLANT PHYSIOLOGY
The following topics will be discussed: photosynthesis, water relations, mineral nutrition and ion uptake, translocation, stress physiology. (*Pre-or corequisites:* 200, 203, and 204; CHEM 231 (or 230 or 233) or written permission of the instructor)
D.J. Ballantyne
F(2-3)

BIOL 331B (1½) (formerly half of 331) PLANT PHYSIOLOGY
The following topics will be discussed: enzymes, carbohydrates, respiration, nitrogen metabolism, lipids, lignins, pigments, phytohormones, tropisms, dormancy, senescence, flowering. (*Pre-or corequisites:* 200, 203, and 204; CHEM 231 (or 230 or 233) or written permission of the instructor)
D.J. Ballantyne
S(2-3)

BIOL 334 (1½) PLANTS AND PEOPLE
An introduction to economically important plants and their products, especially as sources of food, shelter, clothing, drugs and industrial raw materials. Aspects of plant growth and development, physiology, breeding and disease will be discussed for important agricultural and forest plants. Demonstrations will be arranged. (Open to all students in second, third and fourth years. BIOL 150A and B are not required for this course. Normally credit for this course will not be counted toward degree programs in Biology, but Biology students may take this course as a free elective.)
D.J. Ballantyne, B.J. Hawkins, E.D. Styles
F(3-0)

BIOL 335 (1½) (formerly 431A) ICHTHYOLOGY
Selected topics on the evolution, physiology, ecology, neurobiology and behaviour of fishes. Laboratory topics include the taxonomy of major groups of fish, and selected exercises in fish ecology, physiology and behaviour. Laboratories will include field trips. (Credit will not be given for both 335 and MRNE 412.) (*Prerequisite:* 207)
C. Hawryshyn
F(2-3)

BIOL 338 (1½) APPLIED PLANT PHYSIOLOGY
Application of principles of plant physiology to problems in agriculture, forestry, and air pollution. (Normally, credit for this course will not be counted toward degree programs in Biology, but Biology students may take this course as a free elective.) (*Prerequisites:* One of 150, 200, 204, or 334 or permission of instructor)
D.J. Ballantyne
S(3-0)

BIOL 343 (1½) DEVELOPMENTAL PLANT ANATOMY
A study of the origin and development of cells, tissues and organs in vascular plants with special emphasis given to seed plants. The mature structures are discussed as they relate to function. Recent studies of plant ultra-structure are considered in view of development and function. (Not open to students who have 3 units credit for 342.) (*Prerequisite:* 204)
Texts: Esau, *Anatomy of Seed Plants*
J. Kuijt F(2-3)

BIOL 344 (1½) PLANT MICROTECHNIQUE
A study of the techniques used to investigate structural aspects of plant growth, development and function. Techniques covered include paraffin methods, wood sectioning, maceration, clearing, chromosome preparations, photomicrography, histochemistry and autoradiography. (*Prerequisite:* 204) (Offered in spring of even-numbered years) S(2-3)

BIOL 345 (formerly 444) (1½) ANIMAL BEHAVIOUR
An introduction to animal behaviour emphasizing the range of functional patterns and critically assessing analogies with human behaviour. Practical studies to develop observational and descriptive skills are assigned, and there will be a number of class field trips. (Offered in fall of even-numbered years)
D.V. Ellis F(3-3)

BIOL 355 (1½) (formerly part of 350 and 455) EVOLUTION
An introduction to mechanisms of evolution and the history of life on earth. Topics include genetic variation and natural selection, speciation processes, the origin of life, and major events in the fossil record. (*Prerequisites:* 203, 204, 206, 207; 300 recommended)
G.A. Allen, V.J. Tunnicliffe S(3-0)

BIOL 400 (1½) HISTORY OF BIOLOGY
A study of the historical development of the major techniques and ideas of biology. The significance of the important historical contributors to biology will also be considered. Open to third and fourth year students. (*Prerequisite:* 150A/B or permission of the Department) Texts: Assigned readings
R.G.B. Reid S(3-0)

BIOL 401A (1½) (formerly half of 401) LABORATORY APPLICATION OF GENETIC PRINCIPLES
Subject areas to be covered in the laboratory include: slide preparation and photomicroscopy, gene mapping in haploid and diploid organisms, discussion and application of related current techniques in biotechnology, and the use of computer software in the laboratory. (*Prerequisite:* 300)
E.D. Styles F(1-3)

BIOL 401B (1½) (formerly half of 401) APPLICATION OF GENETIC PRINCIPLES
Topics to be discussed include: factors affecting the direction of genetic research, potential uses of recombinant DNA techniques for research, medicine and agriculture, genetics of disease resistance, genetics of aging and behaviour, effects of genetic screening and counselling, prenatal diagnosis and genetic diseases. (*Prerequisite:* 300)
E.D. Styles S(3-0)

BIOL 405A (1½) (formerly half of 405) CELLULAR PHYSIOLOGY
Seminars on recent advances in cell biology. Laboratory exercises in standard methods of animal cell tissue culture. (*Prerequisites:* 200 and BIOC 200. *Pre- or corequisite:* BIOC 300 or permission of Department) (Restrictions on equipment limit enrollment to a maximum of 10 students. Consultation with instructor required prior to registration)
M.J. Ashwood-Smith F(2-3)

BIOL 405B (1½) (formerly half of 405) CELLULAR PHYSIOLOGY
Seminars on recent advances in cell biology. Laboratory exercises in the tissue culture of specialized animal cells, cell fusion and cytogenetics. (*Prerequisite:* 405A. *Pre- or corequisite:* BIOC 300 or permission of Department) (Restrictions on equipment limit enrollment to a maximum of 10 students. Consultation with instructor required prior to registration)
M.J. Ashwood-Smith S(2-3)

BIOL 407 (1½) AQUACULTURE
An introduction to ecologically based management strategies for the cultivation or enhancement of aquatic plants and animals; traditional and current practices will be considered together with the potential for future development and the environmental impacts of aquaculture. (Credit will not be given for both 407 and MRNE 450.) (*Prerequisites:* Fourth year standing or permission of the instructor)
A.P. Austin F(3-3)

BIOL 408 (1½) THE BIOLOGY OF POLLUTION
Biological concepts and methods applied to the recognition, definition and measurement of excessive environmental alteration directly or indirectly affecting world biota including humans; exploration of contributions of bioscience to human perception of, and response to, the stimulus of environmental perturbation. Field and laboratory observation on organisms stressed by various levels of environmental change; one project report and attendance at seminars. (*Pre-or corequisite:* 206 or 203, or written permission of instructor)
A.P. Austin S(2-3)

BIOL 409A (formerly part of 409) (1½) NEUROBIOLOGY
Cellular and developmental aspects of the nervous system, regeneration, trophic effects, connectional specificity, the nerve impulse, essentials of sensory physiology and motor control, junctional transmission, pattern generation, principles of higher receptor organization and central nervous circuitry. Course consists of lectures with oral and written presentations by the students on selected topics. (*Prerequisite:* 305A and 305B) (Enrollment limited to 26 students. Preference given to students planning to take 409B)
G.O. Mackie F(3-0)

BIOL 409B (1½) NEUROBIOLOGY LABORATORY
Neuronal basis of behaviour analysed at the cellular and circuit levels. Selected sensory, central integration, and neuromuscular systems are examined anatomically, using vital staining and intracellular labelling of preselected neurons; and electrophysiologically, using extracellular suction electrodes and intracellular microelectrodes. Results are discussed in class in terms of current ideas about how nervous systems (invertebrate and vertebrate) operate and are written up in individual short reports. Students have access to the lab at all times and are encouraged to work on their own in addition to the scheduled hours. (*Prerequisite:* 409A or permission of the instructor) (Enrollment limited to 8 because of space and equipment)
G.O. Mackie, C.W. Hawryshyn, D. Paul S(1-4)

BIOL 410 (1½) HERPETOLOGY
The biology of amphibians and reptiles, particularly evolutionary relationships, systematics, ecology, and physiology. This course addresses general principles, using amphibians and reptiles as examples. Emphasis also is given to adaptation of ectotherms to seasonally cold environments such as those in Canada. Students are expected to present seminars of special topics and do considerable outside reading. Laboratory classes consist mainly of taxonomic identifications. Field trips are taken when possible. (*Prerequisites:* 207 and 306; *pre- or corequisite:* 455, or permission of instructor)
P.T. Gregory NO(2-3)

BIOL 411A (1½) (formerly half of 411) MARINE AND FRESHWATER ALGAE (PHYCOLOGY)
A comprehensive exploration of both marine and freshwater algae (macro and micro forms) emphasizing ecological, ecophysiological, morphological, environmental impact and aquacultural economic aspects. Field work centres upon live materials from local aquatic communities with emphasis on Cyanobiota, rhodobiota, and Phaeophyta and may include shipboard work in coastal and freshwater environments. Laboratory work includes necessary microtechnique, photomicrography and taxonomic identification and some ecological or cultural projects. (*Prerequisite:* 203 or permission of instructor)
A.P. Austin F(2-3)

BIOL 411B (1½) (formerly half of 411) MARINE AND FRESHWATER ALGAE (PHYCOLOGY)
A comprehensive exploration of both marine and freshwater algae (macro and micro forms) emphasizing ecological, ecophysiological, morphological, environmental impact and aquacultural economic aspects. Field work centres upon live materials from local aquatic communities with emphasis on Chlorobiota, diatoms, dinoflagellates, and the phytoplankton. Use will be made of the Simpson Cowichan Lake Field Station and work may be done on open Pacific coastal biota. (*Prerequisite:* 203 or permission of the instructor)
A.P. Austin S(2-3)

BIOL 412 (1½) ADVANCED ENTOMOLOGY
A study of recent advances in the field of entomology with special emphasis on insect physiology. Students will set up and conduct many of their own experiments, and will be expected to become familiar with the recent literature from leading journals of insect physiology. Both a seminar presentation and laboratory term projects will be required. (*Prerequisite:* 312)
R.A. Ring NO(2-3)

BIOL 414 (1½) NEUROETHOLOGY
Examples of animal behaviour which can be explained in terms of the underlying neuronal mechanisms are selected for study. The course consists of lectures by the instructor with oral and written presentations by the students. (*Prerequisite:* 305A and 305B or permission of the instructor; 345 or 409A recommended)
G.O. Mackie, C. Hawryshyn, D. Paul S(3-0)

BIOL 415A (1½) (formerly half of 415) MYCOLOGY
Morphology and biology of the fungi. Basidiomycota, zoosporic fungi and Gymnomycota will be treated, including medical and plant pathological aspects. A properly annotated collection of at least 25 genera will be required. (*Prerequisite:* 203 or permission of the instructor. Not normally open to second year students)
T.B.A. F(2-3)

BIOL 415B (1½) (formerly half of 415) MYCOLOGY
Morphology and biology of the fungi. Zygomycotina, Ascomycotina, and Deuteromycotina will be treated, including medical, industrial, and plant pathological aspects. A research project will be required. (*Prerequisite:* 203 or permission of the instructor. Not normally open to second year students)
T.B.A. S(2-3)

BIOL 416 (1½) FOREST PATHOLOGY
An introduction to parasitic and nonparasitic forest tree diseases, including the impact of disease on forest ecosystems, with particular emphasis on the Pacific Northwest. Methods of forest disease study will be considered. Other topics include disease management and control including biological control and the importance of mycorrhizae in the limitation of disease development. (*Prerequisites:* CHEM 231; 331 and 343 recommended) (To alternate with 317) NO(2-3)

BIOL 417 (1½) ZOOLOGICAL MICROTECHNIQUE
Lectures and laboratories introducing the principles and methods of microtechnique commonly used by zoologists. Topics include: paraffin embedding, sectioning and staining, plastic embedding and semithin sectioning; frozen sections, fluorescent microscopy, introduction to histochemistry; optical microscopy; microscopic measuring; photomicrography. Students will submit their microscopic preparations and photomicrographs for evaluation. (*Pre- or corequisites:* CHEM 230 or 233 or 231/232 or 232/235, BIOC 200, BIOL 200; or permission of the instructor)
A.R. Fontaine F(1-4)

BIOL 418A (1½) (formerly half of 418) ECOLOGY OF PLANT COMMUNITIES: I
A study of plant communities including familiarization with local vegetation through field trips. Emphasis on vegetation composition, structure, succession. Techniques for community description, classification and ordination. Two day field trip in September, costs to be borne by the students. (*Prerequisite:* 306 or permission of the instructor; 318 recommended)
M.A.M. Bell F(3-3)

BIOL 418B (1½) (formerly half of 418) ECOLOGY OF PLANT COMMUNITIES: II
A study of the environment of plant communities, emphasizing soils, climate and other organisms. Applications to resources management and reclamation. Guest lectures. Includes a major research project on local communities. Two day field trip in January, costs to be borne by the students. (*Prerequisite:* 306 or permission of the instructor; 418A recommended)
M.A.M. Bell S(3-3)

BIOL 420 (1½) APPLIED ECOLOGY
Application of ecology to the human use of the environment. Include such topics as resources planning and management, environmental impact assessment, landscape design, rehabilitation of disturbed habitats, communications for conflict resolution. Strong class participation in course design. Emphasis on field trips, projects, discussions, guest speakers from government and private agencies. (*Prerequisite:* 306 or permission of the instructor; ES 300A and 300B recommended)
M.A.M. Bell S(2-3)

BIOL 421 (1½) PLANT MORPHOGENESIS
The achievement of form and function will be presented in relation to various principles. Individual cases covering a range of organizational levels from molecular to histological will be used to illustrate lower and higher plant development. Tissue organization will be discussed in light of recent advances in histology at the biophysical level. (*Prerequisite:* 309 or 343)
P. von Aderkas S(3-0)

BIOL 423 (1½) PLANT METABOLISM
An advanced discussion on biochemical pathways for carbon, nitrogen, and phosphorus metabolism and mechanisms for regulation of these pathways. Students will be responsible for either one essay or one seminar based on library research of a problem of current interest in plant physiology and biochemistry. (*Prerequisite:* 331 or permission of instructor; BIOC 300 is recommended) (Offered in spring of even-numbered years)
L.A. Hobson S(2-3)

BIOL 424 (1½) BIOLOGICAL ULTRASTRUCTURE
Selected topics from the current literature on cell structure as revealed by the electron microscope. Processes such as motility, transport, intercellular communication, protein synthesis, absorption, secretion, etc. which lend themselves to analysis in structural terms are stressed. Lectures, reading assignments and at least one seminar presentation per student may be expected. (*Prerequisites:* 200 and BIOC 200; 308 or 343 recommended) (Enrollment limited to 26)
G.O. Mackie NO(3-0)

BIOL 425A (1½) (formerly half of 425) ENVIRONMENTAL PHYSIOLOGY OF ANIMALS: I
Physiological adaptations of animals to variations in the physical and chemical environment. This course concentrates on the effects of radiation, low temperature, and chemical toxicology. The laboratory involves familiarization with major techniques and demonstration experiments. (*Prerequisites:* 305A and 305B)
M.J. Ashwood-Smith F(2-3)

BIOL 425B (1½) (formerly half of 425) ENVIRONMENTAL PHYSIOLOGY OF ANIMALS: II
Physiological adaptations of animals to variations in the physical and chemical environment. This course concentrates on topics not covered in 425A, such as adaptations to altitude, diving, and deserts. Students participate in presentation of lecture material. The laboratory involves a major research project. (*Prerequisites:* 305A, 305B and 425A or permission of the instructor)
T.B.A. S(2-3)

BIOL 427 (1½) POPULATION ECOLOGY
A survey of theories of population growth and regulation, life history strategies, and population interactions. Requirements include considerable outside reading and presentation of a class seminar. Laboratories

consist of experiments designed to demonstrate basic principles of population ecology and the use of relevant quantitative techniques. Quantitative aspects of population ecology are stressed. (*Prerequisite:* 306; pre-or *corequisite:* 251 (or equivalent) and 455, or permission of instructor)
P.T. Gregory F(2-3)

BIOL 430 (1½) IDENTIFICATION AND TAXONOMY
Instruction in concepts and methods of species identification, the construction of biological classifications, and the use of nomenclature codes. Practical assignments will include traditional and numerical (computerized) methods of identification, numerical (phenetic and cladistic) methods for the construction of classification and field trips to operating identification centres. Each student will undertake a taxonomic review of a genus of his or her choice, using classical and contemporary methods. Students may use statistical, computer, electron microscopic, photographic or other procedures for the taxonomic project provided they have appropriate technical skills. Lectures will be presented in weekly 2-hour evening sessions and arrangements for practical assignments can be adjusted to the needs of employed biologists. (Students need to operate an IBM PC. Instructional sessions will be arranged during the 2nd and 3rd weeks of the course.) (*Prerequisite:* 4th year standing) May be presented in alternate years. Text: Jeffreys, *Biological Nomenclature;* and other readings.
D.V. Ellis S(2-3)

BIOL 431 (1½) (formerly 431B) TOPICS IN FISH BIOLOGY
Selected topics on behaviour, migration, reproduction and ontogeny of fishes. Individual projects may be required. Laboratory work deals with the taxonomy of selected groups, and will include field trips. (Credit will not be given for both 431 and MRNE 412.) (*Prerequisite:* 335)
C. Hawryshyn S(2-3)

BIOL 432 (1½) MOLECULAR ENDOCRINOLOGY
Basic and molecular aspects of endocrinology will be considered. Lectures will cover brain hormones and their precursors, insulin and its receptor, opiate genes, gene-associated peptides, new glycoprotein hormones, growth factors, steroids, the superfamily of steroid and thyroid receptors, pheromones, oncogenes, and immunoendocrinology. The course consists of lectures and discussions of scientific papers. (*Prerequisites:* 305A and BIOC 200 or permission of instructor)
N.M. Sherwood F(3-0)

BIOL 433A (1½) (formerly half of 433) ADVANCED DEVELOPMENTAL ZOOLOGY
Laboratory projects and exercises will introduce students to methods used in the study of animal development. (*Prerequisite:* 309) (This course is designed to complement 433B; 433A and 433B may be taken in any order)
R.D. Burke NO(1-4)

BIOL 433B (1½) (formerly half of 433) ADVANCED DEVELOPMENTAL ZOOLOGY
Lectures, discussions, seminars and directed readings in the analysis of animal development. Reading and collation of the relevant original literature and synthesis of information for seminars and discussions will be required. (*Prerequisite:* A grade of B or higher in 309 or permission of the instructor) (This course complements 433A; 433A and 433B may be taken in any order)
M. Paul S(3-0)

BIOL 434 (1½) BIOMECHANICS OF ORGANISMS
A study of elemental principles of structural engineering and fluid dynamics applied to the biological world; the course addresses functional aspects of organisms in two contexts: i) biomechanical design including material characteristics and structural forms; and ii) responses in design and behaviour to moving fluids. The anticipated result is an appreciation for the abilities of animals and plants as design engineers. (*Prerequisite:* 206 and a 100 level Physics course) (Offered in fall of odd-numbered years)
V.J. Tunnicliffe F(3-0)

BIOL 442 (1½) PLANT MORPHOLOGY
Comparison of form, structures and reproduction of the vascular plants. The evolution of morphological complexity will be considered in living and extinct plants. Emphasis will be on embryology and development of mature structures. (*Prerequisite:* 204)
P. von Aderkas F(2-3)

BIOL 443 (1½) BIOLOGY OF CONIFERS
A study of the biology of conifers with special emphasis given to the evolution, taxonomy, distribution, physiology, growth and development and reproduction of native species. Laboratories will involve field trips, seedling physiology and development of vegetative and reproductive structures. (*Prerequisite:* 204) (Offered in spring of even-numbered years)
J.N. Owens S(2-3)

BIOL 445 (1½) ADVANCED TOPICS IN ETHOLOGY: ANIMAL COMMUNICATION
An introduction to the primary literature and current research in animal communication and signalling. Areas of major emphasis will include: methods of description and analysis; concepts and theories; and adaptation, phylogeny, and ecology. (*Prerequisite:* 345 or permission of the instructor) S(3-0)

BIOL 450A (1½) (formerly half of 450) MARINE PLANKTON BIOLOGY
A comprehensive study of systematics, physiology and ecology of marine plankton for students with an introductory laboratory course in oceanography. A basic understanding of physical and chemical oceanography is assumed. Effects of light, temperature, pressure, nutrients and other physical and chemical parameters on primary productivity, distribution and abundance of bacteria and phytoplankton, will be examined. Students will be expected to do considerable outside reading from relevant oceanographic literature and to incorporate this with a field or laboratory research program. Participation in research cruises is required. (*Prerequisite:* 311B)
J.L. Littlepage F(2-3)

BIOL 450B (1½) (formerly half of 450) MARINE PLANKTON BIOLOGY
A comprehensive study of systematics, physiology and ecology of marine plankton for students with an introductory laboratory course in oceanography. A basic understanding of physical and chemical oceanography is assumed. Effects of light, temperature, pressure, nutrients and other physical and chemical parameters on secondary productivity, distribution and abundance of protozoa and zooplankton, will be examined. Students will be expected to do considerable outside reading from relevant oceanographic literature and to incorporate this with a field or laboratory research program. Participation in research cruises is required. (*Prerequisite:* 311B)
J.L. Littlepage S(2-3)

BIOL 453 (1½) STRESS PHYSIOLOGY OF PLANTS
An advanced study of the physiological responses of plants to temperature extremes, droughts, salinity, radiation stress and air pollution. (*Prerequisites:* 331 A and B or permission of instructor)(Offered in spring of odd-numbered years)
D.J. Ballantyne NO(3-0)

BIOL 454 (1½) MARINE BENTHOS BIOLOGY
A synthesis of physical, chemical and biological influences on ocean bottom biota. The major characteristics of intertidal, coral reef, shelf and deep sea systems will be discussed. Examples from marine biota will be used to explore modern ecological and evolutionary theories. Emphasis will be on the scientific methods of studying individuals, populations, communities and ecosystems. (*Prerequisite:* 206, 306)
V.J. Tunnicliffe S(2-3)

BIOL 460 (1) HONOURS SEMINAR
Participation in seminars as arranged by the Department and the Honours Coordinator. Required of all Honours students in their fourth year of studies, as an addition to the normal 15 units.
P.T. Gregory Y(Grading: COM, N, or F)

BIOL 490 (1½) DIRECTED STUDIES IN BIOLOGY
In special circumstances the Department may give permission for

supervised individual studies or directed readings to fourth year students. BIOL 490 may be repeated; normally to a maximum of 3 units. (Grading: INC, Letter Grade)

490A	Directed studies in botany	FSY
490B	Directed studies in ecology	FSY
490C	Directed studies in functional biology	FSY
490D	Directed studies in marine biology	FSY
490E	Directed studies in zoology	FSY

BIOL 491 (1½) DIRECTED RESEARCH IN BIOLOGY

In special circumstances the Department may give permission for supervised research projects to fourth year students. (May be repeated, normally to a maximum of 3 units) (Grading: INC; letter grade)

491A	Directed Research in Botany	FSY
491B	Directed Research in Ecology	FSY
491C	Directed Research in Functional Biology	FSY
491D	Directed Research in Marine Biology	FSY
491E	Directed Research in Zoology	FSY

BIOL 499 (3) THESIS OR TUTORIAL

Research under the direction of faculty. Open to Honours students only.
P.T. Gregory Y(Grading: INP; letter grade)

MARINE SCIENCE

The Marine Science courses listed below are offered at the Bamfield Marine Station only during the summer months and may be taken by students with permission of the Biology Department. However, during the winter, courses may be offered by Simon Fraser University at Bamfield. Students working towards a University of Victoria degree may be authorized to take these by the Assistant Dean of Arts and Science.

When authorized by the Dean, such courses will be treated as if they had been offered by the Biology Department at the University of Victoria in determining the students' grade point averages, and in satisfying University, Faculty, and Departmental program requirements.

MRNE 400 (3) DIRECTED STUDIES

A course of directed studies under the supervision of a member of faculty. The study will involve a research project approved by the supervisor in the field of interest of the student, and will be designed to take maximum advantage of the laboratory and/or field opportunities offered by the Bamfield Marine Station. (May be repeated with permission of the Department)

MRNE 401 (3) SPECIAL TOPICS IN MARINE BIOLOGY

This course will be offered, as opportunities arise, by distinguished scientists who are working at the Bamfield Marine Station. It is expected that the course will generally be of a specialized nature and be at a level appropriate to graduate or senior undergraduate students. (May be repeated with permission of Department)

MRNE 402 (1½) SPECIAL TOPICS IN MARINE BIOLOGY

This course will be offered, as opportunities arise, by distinguished scientists who are working at the Bamfield Marine Station and are prepared to offer a course extending over a three week period. This course will be of a specialized nature. (May be repeated with permission of Department)

MRNE 410 (3) MARINE INVERTEBRATE ZOOLOGY

A survey of marine phyla, with emphasis on the benthic fauna in the vicinity of the Bamfield Marine Station. The course includes lectures, laboratory periods, field collection, identification, and observation. Emphasis is placed on the study of living specimens in the laboratory and in the field.

MRNE 411 (3) COMPARATIVE INVERTEBRATE EMBRYOLOGY

A comprehensive study of development of marine invertebrates available at the Bamfield Marine Station, including all major phyla and most of the minor phyla. A total of 25 or 30 lectures, covering gametogenesis, fertilization, larval development and metamorphosis of different groups will be given. Laboratory work will include methods and techniques of obtaining and handling of gametes, preparation and maintenance of larval cultures, and observations up to metamorphosis if possible. Some selected and clearly defined experiments will be performed. Efforts will be made also to study various pelagic larvae collected from the plankton. It is hoped that such a broad approach, as outlined above, will provide the student with fundamental frameworks and insights for analytical studies on the one hand, and for reproductive ecology on the other. (Credit will not be given for both 411 and BIOL 403.)

MRNE 412 (3) BIOLOGY OF FISHES

Classification, physiology, ecology, behaviour and zoogeography of fishes with particular emphasis on those in the marine environment of the British Columbia coast. This course will involve some field projects. (Credit will not be given for both 412 and BIOL 431.)

MRNE 413 (3) BIOLOGY OF MARINE MOLLUSCS

An advanced course of selected topics emphasizing functional morphology, ecology and evolution of this diverse phylum; field trips will be undertaken to survey the representative molluscs of the Bamfield region. Students will be expected to complete an independent field or laboratory study of selected molluscs. (*Prerequisite:* 410 or equivalent)

MRNE 420 (3) MARINE PHYCOLOGY

A survey of the marine algae, with emphasis on the benthic forms in the vicinity of the Bamfield Marine Station. The course includes lectures, laboratory periods, field collection, identification, and observation. Emphasis is placed on the study of living specimens in the laboratory and in the field.

MRNE 430 (3) MARINE ECOLOGY

An analytical approach to biotic associations in the marine environment. Opportunities will be provided for study of the intertidal realm in exposed and protected areas and of beaches and estuaries in the vicinity of the Bamfield Marine Station; plankton studies and investigations of the subtidal and benthic environments by diving and dredging are envisaged. (Credit will not be given for both 430 and BIOL 406.)

MRNE 435 (3) INTRODUCTION TO BIOLOGICAL OCEANOGRAPHY

An introduction to the biology of the oceans, with supporting coverage of relevant physics and chemistry. Emphasis will be placed on plankton biology, community structure and life histories, and influencing environmental factors. Collections will be made from sheltered inlets, through Barkley Sound to offshore waters. The course will involve both field and laboratory studies of plankton organisms.

MRNE 440 (3) BIOLOGY OF MARINE BIRDS

A study of the interrelationship of birds and the marine environment; the systematics and ecological relationships, behaviour, life histories, movement and conservation of marine birds; census techniques and methods of studying marine birds in the field will be treated utilizing seabirds and marine-associated birds in the Barkley Sound region. Seabird identification, classification, morphology, plumages and molt will be examined in the laboratory. (*Prerequisite:* A course in Vertebrate Zoology or permission of the instructor)

MRNE 445 (3) BIOLOGY OF MARINE MAMMALS

A survey course covering systematics and distribution of marine mammals, their sensory capabilities and physiology, with special emphasis on the Cetacea; the course includes lectures, laboratory periods and numerous field trips in the Barkley Sound region. The course will involve an independent field study. (*Prerequisite:* A course in Vertebrate Zoology)

MRNE 446 (3) COMPARATIVE ETHOLOGY

A comparative study of marine animals (vertebrate and invertebrate) emphasizing behavioural description, underlying physiological mechanisms, the biological significance of behaviour and behavioural evolution; the course will include independent laboratory and field studies. (Credit will not be given for both 446 and BIOL 345. *Prerequisites:* Courses in each of Invertebrate Zoology, Vertebrate Zoology, Ecology and Physiology)

MRNE 450 (1½) PRINCIPLES OF AQUACULTURE

An interdisciplinary introduction to the principles underlying the commercial cultivation of aquatic plants and animals emphasizing marine systems. The course will include working site-visits to a range of commercial farms and research and development facilities. (Credit will not be given for both 450 and BIOL 407.)

MRNE 454 (1½) SPECIAL TOPICS IN AQUACULTURE
An examination of the culture techniques for selected groups of aquatic plants, animals or micro organisms. Participants will be expected to complete a project which examines some aspect of applied science relevant to commercial culture. (Credit will not be given for both BIOL 407 and MRNE 454.)

MRNE 460 (1½) SPECIAL TOPICS IN AQUACULTURAL APPLIED SCIENCE
An examination of the principles underlying the application of selected areas of scientific information to commercial aquaculture. Participants will be expected to complete a written project.

MRNE 470 (1½) DIRECTED RESEARCH IN AQUACULTURE
Design and execution of a research project in the field of aquaculture under the written supervision of a scientist working in association with the Bamfield Station. A written report is a requirement.

SCHOOL OF BUSINESS

David A. Boag, B.A. (Laur.), M.B.A., Ph.D. (Tor.), Professor and Director of the School
M. Dale Beckman, B.Sc. (Alta.), M.B.A. (W. Ont.), Ph.D. (Mich.), Professor and Head, International Program
Ali Dastmalchian, B.Sc. (Nat. U. of Iran), M.Sc., Ph.D. (Wales), Professor and Head, Graduate Program
Ignace Ng, B.A., M.A., Ph.D. (S. Fraser), Associate Professor
Nailin Bu, B.Sc. (Fudan, Shanghai), Visiting Lecturer 1991-92
Laura Black, B.A. (McG.), M.A. (Wat.), Cooperative Education Coordinator
Sandra M. Enns, B.A. (Regina), Cooperative Education Coordinator
Jeanne Shoemaker, B.A. (Calif., San Diego), Administrative Officer

The School of Business offers a full time and part time program leading to the degree of Bachelor of Commerce (B. Com.), and plans to offer a Minor program for students pursuing other undergraduate degrees. A mandatory cooperative education component is included. A Master of Business Administration (M.B.A.) program will also be offered (see page 242).

The Bachelor of Commerce program provides students with a broad education in business together with exposure to the liberal arts and the option of some concentration in one of the following areas: Entrepreneurship and Small Business, Tourism Management, or International Business. The opportunity to pursue a program in business without a concentration in any particular area is also available. The Minor program will offer a general education in the functions of business.

The Bachelor of Commerce program consists of eight academic terms and a minimum of four cooperative education work terms. Part time students and students with prior relevant work experience may be granted full or partial exemption from cooperative education requirements. The first cooperative work term will normally begin in either January or May of a student's second academic year of study. Thereafter, work terms will normally alternate with study terms. Normally, the Bachelor of Commerce program thus extends into a fifth academic year.

During the academic year 1991-92, the School of Business will offer qualifying year, second year and selected third year undergraduate courses only. The full program of course offerings will be developed in following years.

Admission

Students are advised that entry to the qualifying year of the program requires admission to the Faculty of Arts and Science and is subject to possible enrolment limits. Entry to the Bachelor of Commerce program is at the second year level and is limited by quota on the basis of academic merit. Therefore, completion of the qualifying year requirements of the program does not guarantee admission to the program. Entry to the Minor program will also be limited by quota.

Applicants for entry to the qualifying year should apply to the Office of Admission Services (see page 7).

Qualifying Year of Program (Faculty of Arts and Science)

The qualifying year of the Bachelor of Commerce program consists of 15 units as follows:

ECON 201 (1½) Principles of Microeconomics
ECON 202 (1½) Principles of Macroeconomics

Either:
ENGL 115 (1½) College Composition and
ENGL 116 (1½) Introduction to Literature or
ENGL 121 (1½) Literature: Prose Fiction and
ENGL 122 (1½) Literature: Poetry and Drama

Either:
MATH 102 (1½) Calculus for Students in the Social and Biological Sciences and
MATH 151 (1½) Finite Mathematics or
MATH 100 (1½) Calculus: 1 and
MATH 151 (1½) Finite Mathematics or
MATH 100 (1½) Calculus: 1 and
MATH 101 (1½) Calculus: 11

Elective courses (6 units)
Not to include any Business courses; students without any previous high school or university Computer Science courses should take 1½ units of 100 level Computer Science.

It is recommended that students include at least 1½ units of electives from the Natural Sciences: Astronomy, Biology, Chemistry, or Physics (courses in Biochemistry and Microbiology are not open to first year students).

All students who are presently completing the qualifying year in Arts and Science, as well as transferring students, must apply for admission to the Bachelor of Commerce program not later than April 30 for entry to the School of Business the following September. The qualifying year or its equivalent at other institutions must be completed before admission to the School of Business will be considered.

Bachelor of Commerce Program

The Bachelor of Commerce degree program consists of 60 units; 21 must be upper level units and 15 are completed in the qualifying year of the program. Full details are as follows:

1. Core
   31½ units required of all students of which
   i) 15 or 16½ are School of Business units.
   ii) 15 or 16½ are units from academic departments other than the School of Business.
   The exact number of School of Business and other units depends on the choice of COM 410 or PHIL 330 (see specific core requirements below).
2. Area of Concentration (optional)
   9 units in one of the three areas of concentration offered (Entrepreneurship and Small Business, Tourism Management, International Business).
3. Other Business and Business Related Courses
   i) 7½ units for students pursuing any of the three areas of concentration.
   ii) 16½ units for students not pursuing any of the three areas of concentration.
   These courses will normally be in the basic areas of business and, with permission of the School, in related fields outside business so that students acquire some indepth training, beyond the core, in general management or analytical skills. With permission of the School, students may also include a limited number of additional concentration area courses in fulfilment of these requirements.
4. Electives
   12 units chosen from the School of Business or from other University offerings.

The specific requirements of the core and concentration categories of the program are as follows:

1. Core Courses
   i) Commerce Core (15 or 16½ units)
   COM 202 (1½) Financial Accounting 1
   COM 210 (1½) Management Accounting 1
   COM 220 (1½) Organizational Behaviour
   COM 230 (1½) Introduction to Management Information Systems
   COM 240 (1½) Management Finance
   COM 250 (1½) Fundamentals of Marketing
   COM 300 (1½) Management of Organizations
   COM 302 (1½) Commercial Law
   COM 340 (1½) Operations Management
   COM 400 (1½) Management Cases Seminar
   COM 410 (1½) Business/Government Relations
   ii) Non Commerce Core (15 or 16½ units)
   Either: ECON 240 (1½) Descriptive Statistics or
   STAT 250 (1½) Introduction to Statistics
   ECON 302 (1½) Intermediate Microeconomic Theory
   ECON 303 (1½) Intermediate Macroeconomic Theory
   ENGL 225 (1½) Technical Communications: Written and Verbal
   PHIL 330 (1½) Professional and Business Ethics
   Plus: the required 9 units in Economics, English and Mathematics in the qualifying year.
2. Area of Concentration
   Students may elect to concentrate in one of three areas: Entrepreneurship and Small Business, Tourism Management, or International Business. In each area, certain courses are compulsory, while others may be selected from a list of open alternatives. The courses designated for each area of concentration are listed below.
   i) Entrepreneurship and Small Business (9 units)
   Required: (4½ units)
   ENT 307 (1½) Introduction to Entrepreneurship
   ENT 403 (1½) Business Plan Development
   ENT 413 (1½) Strategic Analysis of Small Business
   Open: (4½ units)
   ENT 301 (1½) Market Research and Analysis
   ENT 401 (1½) Venture Initiation
   ENT 405 (1½) Management of Innovation
   ENT 407 (1½) Small Business Management
   ENT 411 (1½) Special Topics in Entrepreneurship
   HIST 347 (3) Business and Society in Perspective: The Canadian Experience, 1800-1970
   ii) Tourism Management (9 units)
   Required: (3 units)
   TRM 301 (1½) Introduction to Tourism and The Travel Industry
   TRM 303 (1½) Principles of Tourism Management
   Open: (6 units)
   TRM 307 (1½) Organizational Behaviour in Tourism Management
   TRM 309 (1½) Accounting and Finance for the Tourism Industry
   TRM 407 (1½) Tourism Marketing
   TRM 409 (1½) Selected Topics in Tourism Management
   GEOG 345 (1½) Geography and Planning of Tourism
   GEOG 441 (1½) Geography of Tourism Marketing
   iii) International Business (9 units)
   Required: (4½ units)
   IB 301 (1½) International Business Management
   IB 303 (1½) International Environment of Business
   One of:
   JAPA 201 (1½) Aspects of Japanese Culture
   PACI 200 (3) Cultural Contact and Social Change in the Pacific Region
   PACI 415 (1½) Seminar on Canada and Pacific Asia
   GER 304 (3) A Survey of German Culture
   RUSS 301A (1½) Aspects of Russian Culture: I
   RUSS 301B (1½) Aspects of Russian Culture: II
   SPAN 306 (1½) Spanish Culture and Civilization
   SPAN 307 (1½) Latin American Culture and Civilization
   The equivalent of at least 3 units of a foreign language at any level is also required, to be supplemented, where possible, with immersion studies during international placement coop terms. Students interested in the International Business option are advised to begin taking language courses in the qualifying year of the program.
   Open: (4½ units)
   IB 401 (1½) International Marketing
   IB 403 (1½) International Finance
   IB 408 (1½) International Legal Relations
   ECON 322 (PACI 322) (1½) Economic Development of Japan
   ECON 324 (PACI 324) (1½) Economic Development of SE Asia
   ECON 405A (1½) International Trade Theory and Policy
   ECON 405B (1½) International Monetary Theory and Policy
   Any one of the following if not chosen as a required course:
   JAPA 201 (1½) Aspects of Japanese Culture
   PACI 200 (3) Cultural Contact and Social Change in the Pacific Region
   PACI 415 (1½) Seminar on Canada and Pacific Asia
   GER 304 (3) A Survey of German Culture
   RUSS 301A (1½) Aspects of Russian Culture: I
   RUSS 301B (1½) Aspects of Russian Culture: II
   SPAN 306 (1½) Spanish Culture and Civilization
   SPAN 307 (1½) Latin American Culture and Civilization
   If either PACI 200 (3) or GER 304 (3) is chosen as a required International Business course, only 3 units of open International Business courses are required to complete 9 units in International Business.

Program Scheduling

Qualifying Year - 15 units
ECON 201 and ECON 202
ENGL 115 and ENGL 116
or ENGL 121 and ENGL 122
MATH 102 and MATH 151
or MATH 100 and MATH 151
or MATH 100 and MATH 101
6 units of electives (not to include any Business courses)

Second Year - 15 units
COM 202
COM 210
COM 220
COM 230
COM 240
COM 250
ECON 240 or STAT 250
ECON 302 and ECON 303
ECON 240 or STAT 250
ENGL 225

Third Year - 15 units
COM 300
COM 302
COM 340
10½ units in concentration courses, other business and business related courses, and electives

Fourth Year - 15 units
COM 400
COM 410 or PHIL 330
12 units in concentration courses, other business and business related courses, and electives

Regulations on Academic Performance

Normally, students in the School of Business must obtain a sessional grade point average of at least 3.00 in every academic term; otherwise, they will be required to withdraw from the School for one academic term and to apply for readmission. If readmitted, students will be required to repeat all courses in which a grade of less than C+ was obtained. Courses must be repeated in the next academic term in which they are offered.

Degree Requirements

Students are deemed to have satisfied the graduation requirements if they have satisfied the minimum requirements for graduation (see page 19) and the following conditions:

1. They have successfully met the regulations on academic performance outlined above.
2. They have achieved a grade of C+ in the courses taken to meet the requirements of the area of concentration.
3. They have satisfactorily completed a minimum of four cooperative education work terms, taking into account exemptions granted.

COURSES

(Course offering codes: Y = Sept.-Apr., F = Sept.-Dec., S = Jan.-Apr., K = May=Aug., NO = Not offered, this session)

Students should consult with the School concerning courses offered in a particular year.

COM 202 (formerly 253) (1½) FINANCIAL ACCOUNTING: I
Introduction to the construction and interpretation of financial statements prepared primarily for use by parties external to the issuing firm or other business entity. Emphasis on accounting policies and their underlying rationale as well as on accounting techniques. (*Prerequisite:* Second year standing) F(3-0)

COM 210 (formerly 254) (1½) MANAGEMENT ACCOUNTING: I
Introduction to the development and use of accounting information for management planning and control, and the development of cost information for financial reports. (*Prerequisite:* 202 or 253) SK(3-0)

COM 220 (formerly 120) (1½) ORGANIZATIONAL BEHAVIOUR
An introductory examination of work organizations and the behaviour of individuals within them. Phenomena to be studied include organizational structure, organizational environments, group processes, individual motivation, perception, communication, power processes, leadership, and learning. (*Prerequisite:* Second year standing) (not normally open to students with credit in PSYC 334A or SOCI 324) F(3-0)

COM 230 (1½) INTRODUCTION TO MANAGEMENT INFORMATION SYSTEMS
The use of computers and related devices in achieving the data processing and information objectives of the organization. Hardware, software, and the development of business data processing applications. Instruction in the use of application packages and generators. (*Prerequisites:* 1½ units of 100 level Computer Science; second year standing) SK(3-0)

COM 240 (1½) MANAGEMENT FINANCE
The institutional environment of Management Finance: the legal setting; the tax environment; the structure of money and capital markets. Disbursement of funds: capital expenditures; working capital management; dividend policy and valuations; mergers and acquisitions. Procurement of funds: long-term sources; short and intermediate term sources; the cost of capital; capital structures. Financial analysis and control: forecasting; flow of funds; analysis of financial statements. (*Prerequisite:* 202 or 253) SK(3-0)

COM 250 (1½) FUNDAMENTALS OF MARKETING
An overview of the marketing function within the firm. Promotion, product design, pricing and distribution channels are examined as key elements of the marketing mix. Consumer buyer behaviour, trends in retailing, wholesaling, sales force management and marketing research are other topics to be reviewed. (*Prerequisite:* Second year standing) F(3-0)

COM 300 (1½) MANAGEMENT OF ORGANIZATIONS
An introduction to organizational and management theory. The nature of managerial work, managerial principles, decision making, rationality, motivation, leadership, communication, and conflict resolution. Approaches to organizational design for management. Applications of general systems theory; the organization and its environment. F(3-0)

COM 302 (1½) COMMERCIAL LAW
The law of contract with particular emphasis on personal property and business relations, including consideration of the problems arising out of the day-to-day operation of a commercial undertaking. NO(3-0)

COM 340 (1½) OPERATIONS MANAGEMENT
Introduction to the broad scope and major strategic, tactical and operational decisions of operations management, as well as important interactions with other functional areas. Topics covered include types of production processes, process flow analysis, forecasting, resource requirements planning, location and layout of facilities, project planning/management, job design, hierarchical production planning, and introduction to inventory control, production scheduling, and quality assurance. (*Prerequisites:* ECON 240 or STAT 250) NO(3-0)

COM 400 (1½) MANAGEMENT CASES SEMINAR
A series of management case studies designed to illustrate the application and integration of the various disciplinary methodologies to management problems, with some reference to ethical issues in public and private sector management, and management decision making under conditions of uncertainty. (*Prerequisite:* fourth year standing) NO(3-0)

COM 410 (1½) GOVERNMENT AND ENTERPRISE
Competition policy, public regulation, public enterprise and international environments. Theoretical treatment and case studies of such topics as macro-economic planning, industrial strategy, and energy and other natural resources. NO(3-0)

ENT 301 (1½) MARKET RESEARCH AND ANALYSIS
Identification and definition of problems and formulation of suitable research structures; techniques of data collection, development, evaluation and analysis; critical evaluation of alternative research designs and correlation of design and situational requirements; analysis of consumer motivation and behaviour in integrated market research; information sources; information cost/effectiveness evaluation. (*Prerequisite:* COM 250) FS(3-0)

ENT 307 (1½) INTRODUCTION TO ENTREPRENEURSHIP
The impact of entrepreneurship and the function of the entrepreneur in new venture creation. A framework is developed which incorporates marketing feasibility studies and financial analysis into a comprehensive business plan. The business venture is examined with respect to financial planning, marketing, management, and tax decisions at the various stages of the business life cycle. (*Prerequisites:* COM 240 and COM 250) S(3-0)

ENT 401 (1½) VENTURE INITIATION
Factors affecting new venture initiation including completion of a venture opportunity analysis, examination of and approaches to funding, tax planning, cashflow, and the mechanics of startup. (*Prerequisite:* ENT 307) NO(3-0)

ENT 403 (1½) BUSINESS PLAN DEVELOPMENT
The central focus is on the preparation of a business plan which fosters opportunity recognition skills and examines ways entrepreneurs identify and commit the necessary resources to finance their ventures. Sources of risk and venture capital and other financing available to entrepreneurs are discussed as well as how appropriate financing is obtained. (*Prerequisite:* ENT 307) NO(3-0)

ENT 405 (1½) MANAGEMENT OF INNOVATION
History of innovations, technology forecasting, management of research and development, problems of labour acceptance of innovation. (*Prerequisite:* COM 300) NO(3-0)

ENT 407 (1½) SMALL BUSINESS MANAGEMENT
Use of the case study method to investigate and analyze problems related to plant location, labour relations, organization control, finances, taxation, and other issues of interest to the small business entrepreneur. (*Prerequisites:* COM 300; fourth year standing) NO(3-0)

ENT 411 (1½) SPECIAL TOPICS IN ENTREPRENEURSHIP
An in depth discussion and research of emerging topics within the field of entrepreneurship. (*Prerequisite:* fourth year standing) NO(3-0)

ENT 413 (1½) STRATEGIC ANALYSIS OF SMALL BUSINESS
Situational analysis, definition of explicit/implicit goals, objectives, strategies, market and industry position, competitive financial and organizational status, critical areas of operation and technological threats; development of analytical capabilities in unprogrammed situations, application of theory and the integration of technical and managerial inputs to strategic planning and decision making in live problem areas; development of solutions and their effective communication to corporate decision makers; consulting and advisory roles and methods. (*Prerequisite:* fourth year standing) NO(3-0)

TRM 301 (1½) INTRODUCTION TO TOURISM AND THE TRAVEL INDUSTRY
Survey of the travel and tourism industry with emphasis on marketing tourism and travel, research and development of tourist destinations, and the economic and social impact of tourism. FS(3-0)

TRM 303 (1½) PRINCIPLES OF TOURISM MANAGEMENT
The structure and functioning of tourism systems and the manner in which general principles of management are applied to the tourism industry. (*Prerequisite:* COM 300) SK(3-0)

TRM 307 (1½) ORGANIZATIONAL BEHAVIOUR IN TOURISM MANAGEMENT
Analysis of human resource problems in the tourism industry and the tools and strategies necessary for solution. (*Prerequisites:* COM 220 and TRM 301) NO(3-0)

TRM 309 (1½) ACCOUNTING AND FINANCE FOR THE TOURISM INDUSTRY
Practical application of financial and management accounting principles and procedures to situations in the hospitality and service industries. Students gain a working knowledge of the form and content of financial statements, their interrelationships, and the various uniform systems of accounts in hotels, restaurants and tourist agencies. Application of business finance principles to tourism management. (*Prerequisites:* COM 210 and COM 240) NO(3-0)

TRM 407 (1½) TOURISM MARKETING
Principles of marketing as applied to lodging and food service industries. Lectures, guest speakers, and student project teams that focus on hotels, restaurants, and allied institutional settings. (*Prerequisites:* COM 250 and TRM 301) NO(3-0)

TRM 409 (1½) SELECTED TOPICS IN TOURISM MANAGEMENT
Directed reading and research in selected topics of tourism policy and planning. (*Prerequisites:* TRM 303; fourth year standing) NO(3-0)

IB 301 (1½) INTERNATIONAL BUSINESS MANAGEMENT
Decision making in the international environment; political, cultural, and economic risk management. (*Prerequisite:* COM 300) S(3-0)

IB 303 (1½) THE INTERNATIONAL ENVIRONMENT OF BUSINESS
Prepares students to understand those aspects of international political economy relevant to contemporary business. Emphasis on the important relations among nations, and business and economic institutions that influence managers, consumers, and citizens. SK(3-0)

IB 401 (1½) INTERNATIONAL MARKETING
Opportunities, characteristics, trends in foreign markets; alternative methods; strategies; organizational planning, control; problems of adapting marketing concepts and methods in international settings. (*Prerequisite:* COM 250) NO(3-0)

IB 403 (1½) INTERNATIONAL FINANCE
Financial problems of multinational business; international financial environment; long term capital commitment to an international venture; financial techniques for firm operation. (*Prerequisite:* COM 240) NO(3-0)

IB 408 (1½) INTERNATIONAL LEGAL RELATIONS
The legal aspects of various international economic organizations including the World Bank, the International Monetary Fund, and the General Agreement on Tariffs and Trade (GATT). Canadian administrative law aspects relating to regulation of trade will be analyzed in the economic and political setting of the world community. (*Prerequisite:* COM 302) NO(3-0)

DEPARTMENT OF CHEMISTRY

Terence E. Gough, B.Sc., Ph.D. (Leic.), Professor and Chair of the Department
Walter J. Balfour, B.Sc. (Aberd.), Ph.D. (McM.), D.Sc. (Aberd.), Professor
Gordon W. Bushnell, M.A., B.Sc. (Oxon.), Ph.D. (W. Indies), Professor
Keith R. Dixon, B.A. (Cantab.), Ph.D. (Strath.), Professor
Alfred Fischer, B.Sc., M.Sc., Ph.D. (N.Z.), Professor
Alexander D. Kirk, B.Sc., Ph.D. (Edin.), Professor
Alexander McAuley, B.Sc., Ph.D., D.Sc. (Glas.), C.Chem., M.R.S.Chem., Professor
Reginald H. Mitchell, B.A., M.A., Ph.D. (Cantab.), F.C.I.C., Professor
Stephen R. Stobart, B.Sc., Ph.D. (Nott.), Professor
Graham R. Branton, B.Sc., Ph.D. (Southampton), Associate Professor
Thomas W. Dingle, B.Sc., Ph.D. (Alta.), Associate Professor
Thomas M. Fyles, B.Sc. (U. of Vic.), Ph.D. (York), Associate Professor
Martin B. Hocking, B.Sc. (Alta.), Ph.D. (Southampton), C.Chem., F.R.S.Chem., Associate Professor
Gerald A. Poulton, B.A., Ph.D. (Sask.), Associate Professor
Frank P. Robinson, A.B. (Fisk), Ph.D. (Alta.), F.C.I.C., Associate Professor
Peter C.F. Wan, B.Sc., Ph.D. (Tor.), Associate Professor
Paul R. West, B.Sc., Ph.D. (McM.), Associate Professor
David J. Berg, B.Sc. (U. of Vic.), Ph.D. (Calif., Berk.), Assistant Professor
David A. Harrington, B.Sc. (Cant.), Ph.D. (Auck.), Assistant Professor
Claude Spino, B.Sc. (Montr.), Ph.D. (Brit. Col.), Assistant Professor
John A. Barnes, B.A. (Kan.), M.Sc., Ph.D. (Stan.), Senior Scientific Assistant - Mole Beams Laboratory
David E. Berry, B.Sc. (Liv.), Ph.D. (Brist.), Senior Laboratory Instructor
Robert I. Blazey, B.Sc. (R'dg.), Administrative Officer
Terrance K. Davies, B.Sc. (U. of Vic.), Senior Scientific Assistant
Christine Greenwood, Senior Scientific Assistant
Karel Hartman, L.I.R.I., B.Sc. (U. of Vic.), Senior Laboratory Instructor
Peter Marrs, B.Sc., Ph.D. (Brit. Col.), Senior Laboratory Instructor
David L. McGillivray, B.Sc. (Edin.), Ph.D. (Ott.), Senior Scientific Assistant
Richard S. Reeve, B.Sc. (U. of Vic.), Ph.D. (Queen's), Coordinator, Cooperative Education Program
Barbara A. Rempel, B.Sc. (McG.), Senior Laboratory Instructor
Alan W. Taylor, B.Sc., M.Sc. (U. of Vic.), Ph.D. (Brit. Col.), Senior Laboratory Instructor

Visiting and Adjunct Appointments:
R.N. O'Brien, B.A.Sc., M.A.Sc. (Brit. Col.), Ph.D. (Manc.), Adjunct Professor (1989-91)
M. Coreen Hamilton, B.Sc. (McG.), Ph.D. (Alta.), Adjunct Associate Professor (1990-91)

Alexander G. Briggs, B.Sc. (Mt. All.), M.Sc. (St. And.), Ph.D. (U. of Vic.), Visiting Assistant Professor (1989-91)
Neil J. Meanwell, B.Sc., Ph.D. (Sheff.), Visiting Assistant Professor (1990-91)

GRADUATE PROGRAMS

For information on studies leading to the M.Sc. and Ph.D. degrees, see page 242.

GENERAL, MAJOR AND HONOURS PROGRAMS

The Department of Chemistry offers a variety of programs leading to the B.Sc. degree. These are intended to provide students with the opportunity of undertaking either specialized studies in Chemistry, or a broader program with Chemistry as a focal point supplemented by other disciplines. These programs provide preparation for a wide range of careers requiring a background of Chemistry.

The Honours and Major Programs are designed for those students wishing to embark on careers as professional chemists. In the Honours degree, a student undertakes an in-depth study of Chemistry with other supporting physical sciences. A feature of the Program is that the student participates in a short research project in the final year of study. The Honours Program normally requires 35½ units* of Chemistry courses within a total of 61 units for the degree. Six units of mathematics, 3 units of physics and 3 units of another science are required corequisites. On graduation as a professional chemist the candidate may either enter employment in a variety of industries or proceed to graduate school and the higher qualifications of M.Sc. and Ph.D. The Major Program provides the student with somewhat more flexibility in the choice of courses. Twenty-five and one half units* of Chemistry are required, together with 6 units of mathematics, 3 units of physics and 3 units of another science as corequisites. The degree is sufficiently specialized to present an attractive chemical background to a prospective employer and to provide the opportunity for students maintaining high averages to continue to graduate school. Both these programs are suitable for students intending to enter a career in teaching at the secondary level.

The Department also offers considerable scope for students wishing to include Chemistry as part of a B.Sc. or B.A. General program. Students with this training will frequently find career opportunities in industry, both at the technical and managerial levels, in business, teaching and many other occupations. The influence of Chemistry in modern society is considered in Chemistry 300A/B courses intended for nonscientists who have successfully completed at least 15 units of university credit.

* Students who bypass 102 by completing the 140/245 sequence require 34 units of Chemistry courses for an Honours program and 24 units of Chemistry courses for the Major program.

COOPERATIVE EDUCATION PROGRAMS

The Cooperative Education Program in the Faculty of Arts and Science is described on page 36.

Entry to the Chemistry Cooperative Education Program is restricted to students who are enrolled in an Honours or Major program offered by the Department. To enter and remain in the Chemistry Cooperative Education Program, students must normally maintain a B average (4.50) in Chemistry courses and overall. Students are also required to complete satisfactorily at least five work terms. Their first work term normally will be in the summer at the end of their first academic year and thereafter the year-round sequence is one of alternating four month terms of academic study and work experience. A student may at any time transfer from the Chemistry Cooperative Education Program to a regular Chemistry program.

Each Work Term is recorded on the student's academic record and transcript (as COM, N or F) and details of Work Terms are recorded on the Record of Work Terms which is attached to the student's academic record and transcript.

COURSE REQUIREMENTS OF CHEMISTRY UNDERGRADUATE PROGRAMS

Students with credit in the following courses which are no longer offered may take the specified substitutions in any undergraduate program:

CHEM 124	for 101 and 102
CHEM 145	for 245
CHEM 224	for 222 and 245
CHEM 233	for 231 and 235
CHEM 316 and 317	for 312 and 318
CHEM 325 and 422	for 424 and 425
CHEM 423	for 323

First Year (General or Major or Honours)

CHEM 100[A], or 101[B], or 140[C]	(1½)
CHEM 102, or 245[D]	(1½)
MATH 100/101	(3)
Two of PHYS 110 (or 125)/120/220 or at least a grade of B in PHYS 102	(3)
Other courses (Electives; may include CHEM 231)	(6)

[A] For students with Chemistry 11 and Algebra 12 or Mathematics 12 or equivalents
[B] For students with Chemistry 12 and Algebra 12 or Mathematics 12 or equivalents
[C] For students with at least "B" standing in Chemistry 12 and Algebra 12
[D] For students with at least "B" standing in CHEM 140

Second Year (General)

CHEM 213/222/231/235/245	(7½ or 6*)
MATH 200/201	(3)
Other courses (Electives)	(4½ or 6*)

* If CHEM 245 completed previously

Second Year (Major or Honours)

CHEM 213/222/231/235/245	(7½ or 6*)
MATH 200/201	(3)
Three units of 200 level science courses chosen from ASTR, BIOC, BIOL, CSC (including 160), MATH, MICR, PHYS, or STAT courses with the exception of BIOC 201, BIOL 250, 251, CSC 200, MATH 240, 242, PHYS 210, STAT 254	(3)
Other courses (Electives; may include options not used above)	(3* or 1½)

* If CHEM 245 completed previously

Third and Fourth Years (General)

Nine additional units of chemistry in courses numbered above 300 for which the required prerequisites have been taken	(9)
Nine units in a second area of concentration	(9)
Other courses	(12)

Third and Fourth Years (Major)

CHEM 312/318/323/324/335/338/345/346	(12)
Any two of CHEM 411/424/425/433/434/444/446	(3)
Other courses	(15)

Third Year (Honours)

CHEM 312/318/323/324/335/338/345/346/399	(13)
Other courses	(3)

Fourth Year (Honours)

Any six of CHEM 411/424/425/433/434/444/446	(9)
CHEM 499	(3)
Other courses	(3)

NOTES: 1. Courses may be taken in different sequences and in different years than those indicated provided that the co- and prerequisite requirements are satisfied. However, students must be extremely careful in planning programs that differ from the normal sequence.

2. Students considering graduate work in chemistry are advised to acquire a reading knowledge of at least one of French, German or Russian.

3. Students may not register for a course in Chemistry if they have a D grade in the prerequisite Chemistry course unless they receive written permission of the Department.

4. Glasses or face shields must be worn by all students in laboratories. These are available in the Department. Chemistry Department laboratory notebooks may be purchased in the University Bookstore.

HONOURS

The general requirements for admission to the Third Year of an Honours Program are specified in the table above. Permission of the Department is required for admission into each of the Third and Fourth Years of the Chemistry Honours program. For this, the Department is to be consulted, by interview or by letter, no later than one month before the last day for submission of applications for admission or readmission to the University. The minimum requirement for admission to the Fourth Year is a second class average in all the work of the Third Year and also in the required courses of the Third Year Chemistry Honours Program. Honours students are advised to include an additional mathematics course among their electives. Suitable courses are Computer Science 110, 112, 115, and Mathematics 323A/B, 330A/B.

All Chemistry Honours students must maintain a full load throughout their program, i.e., must complete a minimum of 6 units of courses per term. A student in the Chemistry Honours Program is required to attain a 6.50 graduating average, and a grade point average of 6.50 or higher in all required third and fourth year chemistry courses in order to obtain a First Class Honours degree. To obtain a Second Class Honours degree a student is required to obtain at least a 4.00 graduating average.

DOUBLE HONOURS

In order to qualify for First Class Honours in Chemistry, a student in a double Honours degree program which includes Chemistry as one of the areas must achieve a grade point average of at least 6.50 in all of the third and fourth year courses required for Honours Chemistry, and a grade point average of at least 6.50 in all of the third and fourth year chemistry courses. To obtain Second Class Honours in Chemistry, a student must obtain a grade point average of at least 4.00 in all of the third and fourth year courses required for Honours Chemistry.

BIOCHEMISTRY OR MICROBIOLOGY and CHEMISTRY COMBINED MAJOR

Students wishing to obtain a combined major in Biochemistry or Microbiology and Chemistry should take the following program.

First Year

CHEM 100[A], or 101[B], or 140[C] (1½)
CHEM 102, or 245[D] (1½)
ENGL 121/122, or 115/116 (3)
MATH 100/101 (3)
Two of PHYS 110 (or 125)/120/220 or at least a grade of B in PHYS 102 (3)
Other courses (Electives; may include CHEM 231) (3)

[A] For students with Chemistry 11 and Algebra 12 or Mathematics 12 or equivalents
[B] For students with Chemistry 12 and Algebra 12 or Mathematics 12 or equivalents
[C] For students with at least "B" standing in Chemistry 12 and Algebra 12
[D] For students with at least "B" standing in CHEM 140

Second Year

BIOC 200 (1½)
BIOL 200 (1½)
CHEM 213/222/231/235/245 (7½ or 6*)
MATH 200 (1½)
MICR 200 (3)
Other courses (Electives) (0 or 1½*)
*If CHEM 245 completed previously

Third Year

BIOC 300 (3)
BIOC 301 (1½)
BIOC 380 or MICR 380 (0)
CHEM 323/324/335/338/345/346 (9)
MICR 301/302 (3)

Fourth Year

Two of BIOC 401/403/404/405/407 (3)
BIOC 406 or MICR 406 (3)
BIOC 480 or MICR 480 (1½)
CHEM 312/433 (3)
CHEM 424 or other 400 level Chemistry course with permission of department (1½)
Two of MICR 401/402/403/404/405 (3)

COMBINED PROGRAMS IN CHEMISTRY AND MATHEMATICS

For a B.Sc. degree in the Combined Chemistry and Mathematics Program students may take a Major or Honours program. These programs are not joint degrees in Chemistry and Mathematics, but a single degree program composed of a selected combination of courses from each of the departments. Students opting for either of these combined programs must contact the Chemistry and Mathematics Departments and each student will be assigned an adviser from each of these departments. Students considering proceeding to graduate work in either Chemistry or Mathematics must consult with their adviser prior to making their final choice of courses.

All combined Chemistry and Mathematics Honours students must complete a minimum of 7½ units of courses per term. A student graduating in the combined Honours program is required to attain a 6.50 or higher graduating average and a grade point average of 6.50 or higher over the group of required 300 and 400 level courses in chemistry and mathematics in order to obtain a First Class Honours degree. To obtain a Second Class Honours degree a student is required to obtain at least a 4.00 graduating average.

First and Second Year (Major or Honours)

CHEM 100[A], or 101[B], or 140[C] (1½)
CHEM 102, or 245[D] (1½)
CHEM 213/222/231/235/245 (7½ or 6*)
Two of C SC 110, 112 and 115 (3)
MATH 100/101/200/201/233A/233C (9)
Two of PHYS 110 (or 125)/120/220 or at least a grade of B in PHYS 102 (3)
Other courses (Electives) (4½ or 6*)

[A] For students with Chemistry 11 and Algebra 12 or Mathematics 12 or equivalents
[B] For students with Chemistry 12 and Algebra 12 or Mathematics 12 or equivalents
[C] For students with at least "B" standing in Chemistry 12 and Algebra 12
[D] For students with at least "B" standing in CHEM 140
*If CHEM 245 completed previously instead of 102

Third and Fourth Year (Major)

(All courses listed below must be 300 level or above)
CHEM 312/323/324/345/346/444 (or 425)/446 (10½)
MATH 325/326/330A/330B/333A (7½)
One of MATH 333C, 422 or 423 (1½)
Course chosen from the Mathematics Department in consultation with that Department (1½)
Course(s) chosen in consultation with the Chemistry and Mathematics Departments (3)
Other courses (Electives) (6)

Third and Fourth Year (Honours)

(All courses listed below must be 300 level or above)
All Chemistry courses listed under Major program plus (10½)
CHEM 399/499 (4)
MATH 333A/333C/334/336/338/445A/B (10½)
Course(s) chosen from the Mathematics Department in consultation with the Mathematics Department (3)
Other courses (Electives) (3)

Some possible courses which might be used to fulfill the chosen units in the above programs are: CHEM 306; 318; 335; 337; 338; 424; 425; 444;C SC 349A; 349B; MATH 352, 368A, 368B (for Honours, 325 and 326); STAT 353*; 354*.

* These courses have STAT 250 and 251 as prerequisites, which would have to be included in the student's program as options.

UNDERGRADUATE COURSES

The names of faculty instructing courses, together with the required and recommended texts for each course, may be obtained from the Department.

Students formerly enrolled in Chemistry who have taken courses no longer listed in the Calendar should consult the Department to determine which of the courses taken may count as prerequisites for those currently listed.

(Course offering codes: Y = Sept.-Apr., F = Sept.-Dec., S = Jan.-Apr., K = May-Aug., NO = Not offered, this session)

CHEM 100 (1½) INTRODUCTION TO CHEMISTRY
Introduction to the modern theory of atomic structure and its relation to chemical bonding, molecules, states of matter, aqueous ionic equilibrium; introduction to organic chemistry. This course includes a laboratory illustrating the behaviour of chemical systems and some of the basic techniques associated with quantitative chemical experimentation. (Credit will not be given for both this course and any of 101, 103, 120, 124, or 140.) (*Prerequisites:* Algebra 12 (or Mathematics 12) and Chemistry 11 or their equivalents) (NOTE: The workload in this course is very heavy and it is strongly recommended that students enrolling in it take a reduced course load.) F(4-3)

CHEM 101 (1½) FUNDAMENTALS OF CHEMISTRY: I
Introduction to the modern theory of atomic structure and its relation to chemical bonding, molecules, states of matter; introduction to organic chemistry. This course includes a laboratory illustrating the behaviour of chemical systems and some of the basic techniques associated with quantitative chemical experimentation. (Credit will not be given for both this course and any of 100, 103, 124, or 140.) (*Prerequisites:* Algebra 12 (or Mathematics 12) and Chemistry 12 or their equivalents. Note that 100 is available to students without Chemistry 12.) FS(3-3)

CHEM 102 (1½) FUNDAMENTALS OF CHEMISTRY: II
Basic physical chemistry including thermodynamics, electrochemistry, and equilibrium in chemical systems; introduction to inorganic chemistry. This course includes a laboratory illustrating the behaviour of chemical systems and some of the basic techniques associated with quantitative chemical experimentation. (Credit will not be given for both this course and any of 103, 124, or 145. Students with 100 must register in special sections of 102 which have 4 lectures a week.) (*Prerequisite:* 100 or 101 or 140) S(3-3)

CHEM 140 (1½) PRINCIPLES OF CHEMISTRY
Introduction to modern atomic structure and molecular orbital theory and their relation to chemical bonding, molecules, and states of matter; introduction to inorganic chemistry. This course includes a laboratory illustrating the behaviour of chemical systems and some of the basic techniques associated with quantitative chemical experimentation. (Designed for students with a good preparation in Chemistry and Mathematics who wish to take a challenging course in Chemistry and who feel confident in proceeding at an accelerated pace.) (Credit will not be given for both this course and any of 100, 101, 120, or 124.) (*Prerequisites:* At least a B standing in Chemistry 12 and Algebra 12 or their equivalents. If there is any uncertainty, a placement examination may be given. *Pre-or corequisite:* MATH 100) F(3-3)

CHEM 150 (1½) ENGINEERING CHEMISTRY
Thermochemistry; atomic and molecular structure; chemical bonding; gases, liquids, and solids; solutions and phase equilibria; equilibrium; chemical thermodynamics; electrochemistry. (Credit will not be given for both this course and any of 100, 101, 102 or 140.) (*Prerequisites:* Algebra 12, Chemistry 11, Chemistry 12 or their equivalents. Students with Chemistry 11 or equivalent must register in special sections of 150 which have 4 lectures per week.) (This course is open only to students in Engineering.) S(3-3)

CHEM 213 (1½) PRACTICAL SPECTROSCOPY
Elementary theory and applications of infrared, UV-visible, mass, and nuclear magnetic resonance spectroscopy to inorganic and organic compounds. (Credit will not be given for both this course and 233 or 314 or 316.) (*Pre-or corequisite:* 231) F(3-3)

CHEM 222 (formerly half of 224) (1½) INTRODUCTION TO INORGANIC CHEMISTRY
Fundamental concepts of inorganic chemistry, with emphasis on periodicity, structure, bonding and reactivity; principles will be illustrated using the chemistry of selected groups of elements. (*Prerequisite:* 102 or 140 with at least a B grade) SK(3-4)

CHEM 231 (formerly half of 230/233) (1½) INTRODUCTORY ORGANIC CHEMISTRY
Functional group survey; alkanes, cycloalkanes, conformational analysis; stereochemistry; nucleophilic substitution, elimination; alkenes, alkynes, dienes; alcohols and ethers. This course is a prerequisite for all other courses in organic chemistry. (Credit will not be given for both this course and either 230 or 233.) (*Prerequisite:* 100 or 101 or 140, or 120 with permission of the Department) FS(3-0)

CHEM 232 (formerly half of 230) (1½) ORGANIC CHEMISTRY FOR HEALTH AND BIOLOGICAL SCIENCES
Aromatic compounds; introduction to spectroscopy; aldehydes, ketones; carboxylic acids and derivatives, natural products; carbohydrates, amino acids, proteins, terpenoids, steroids, aldol condensations, parallels in biological systems, fatty acid biosynthesis. This course is intended for students in biology and those preparing to enter professional schools such as Medicine, Pharmacy, Dentistry, Forestry (see page 28) and Nursing. (Credit will not be given for both this course and any of 230 or 233 or 235.) (*Prerequisite:* 231. *Pre- or corequisite:* 140 with at least a B grade or 102) S(3-4)

CHEM 235 (formerly half of 233) (1½) ORGANIC CHEMISTRY
Free radicals; aromatic compounds; aldehydes and ketones; carboxylic acids and derivatives; beta-dicarbonyl compounds; carbohydrates. This course is a continuation of 231 intended for Honours and Major Chemistry students and is part of a sequence incorporating 335 and 338 which should be taken by any student contemplating further courses in organic chemistry. (Credit will not be given for both this course and any of 230 or 232 or 233.) (*Prerequisite:* 231. *Pre- or corequisites:* 140 with at least a B grade or 102) SK(3-4)

CHEM 245 (formerly half of 224) (1½) INTRODUCTORY PHYSICAL CHEMISTRY
Basic physical chemistry including thermodynamics, electrochemistry, properties of solutions, phase equilibria, and chemical kinetics; emphasis will be placed on the extension and application of the theory and principles introduced in Chemistry 100, 101, 102 and 140; the laboratory portion of the course emphasizes physical measurement applied to chemical systems. (Credit will not be given for both this course and 145.) (*Prerequisites:* 102 or 140 with at least a B grade; MATH 100 or 102 with at least a B grade. *Pre- or corequisite:* MATH 101) FS(3-4)

CHEM 300A (1½) (formerly half of 300) CHEMISTRY IN MODERN SOCIETY
This course is intended for nonscientists and will consist of lectures, demonstrations, class experiments and discussions. This course is designed to show the relevance of chemistry to modern life by examination of such topics as drugs and poisons (eg. hallucinogens, narcotics), agricultural chemicals (eg. pesticides, fertilizers), and food chemicals (eg. vitamins, additives). Students will be encouraged to keep abreast of controversial chemical issues. Discussions will place emphasis on the correct application of the scientific facts as opposed to misleading applications or speculations. (300A and 300B may be taken in either order.) (Credit may not be obtained for both 300A/300B and any other Chemistry course numbered 200 and above.) NO(3-0)

CHEM 300B (1½) (formerly half of 300) CHEMISTRY IN MODERN SOCIETY
This course is intended for nonscientists, and will consist of lectures, demonstrations, class experiments and discussions. This course is designed to show the relevance of chemistry to modern life by examination of such topics as energy (e.g. petroleum, nuclear), radiochemistry, water pollution (e.g. soaps and detergents, industrial disposal), air pollution (e.g. smog, ozone), metals, and plastics. Students will be encouraged to keep abreast of controversial chemical issues. Discussions will place emphasis on the correct application of the scientific facts as opposed to misleading applications or speculations. (300A and 300B may be taken

in either order.) (Credit may not be obtained for both 300A/300B and any other Chemistry course numbered 200 and above.) S(3-0)

CHEM 302 (1½) INDUSTRIAL CHEMISTRY WITH SPECIAL REFERENCE TO AIR POLLUTION
Chemical principles used in the manufacture of commodity chemicals, fertilizers, explosives, and in the mining and smelting industries. Problems and methods of emission control, by-product utilization and waste disposal, with particular reference to gaseous discharges. Elements of gaseous dispersal procedures and limitations, air pollution chemistry. (NOTE: This course is primarily designed for students who are not majoring in Chemistry. Credit will not be given for both 302 and 306.) (*Prerequisite:* 102 or 140 with at least a B grade) F(3-0)

CHEM 303 (1½) INDUSTRIAL CHEMISTRY WITH SPECIAL REFERENCE TO WATER POLLUTION
Chemical principles used in the petroleum production and refining, petrochemical, pulp and paper, and fermentation industries. Emission problems and their control, by-product utilization and waste disposal into soil, water and air. Assimilatory capacities, eutrophication, and natural and manmade control and recovery procedures for water pollutants. (NOTE: This course is primarily designed for students who are not majoring in Chemistry. Credit will not be given for both 303 and 306.) (*Prerequisite:* 231. *Pre- or corequisite:* 232 or 235) S(3-0)

CHEM 306 (1½) INTRODUCTION TO THE CHEMICAL PROCESS INDUSTRIES
A comparative discussion of a number of chemical industries and the details of their processes. To include unit operations, unit processes and economics. (NOTE: This course is primarily designed for students taking a Chemistry program. Credit will not be given for both 306 and 302 or 303.) (*Prerequisites:* 231 and 245. *Pre- or corequisites:* 222 and 232 or 235) S(3-0)

CHEM 312 (1½) INTRODUCTORY QUANTITATIVE ANALYSIS
An introduction to the basis of quantitative analytical chemistry, treatment of data and chemical equilibrium. Solution equilibria will be used as the chemical basis for some of the most commonly used chemical instrumental methods, namely potentiometry, chromatography, ultraviolet/visible and atomic absorption spectrometry. (Normally, credit cannot be obtained for 312 and 316 or 317.) (*Prerequisite:* 145 or 245, or 232 or 235 with permission of Department) FK(3-3)

CHEM 318 (1½) INSTRUMENTAL TECHNIQUES OF ANALYSIS
Theory and applications of the most generally applied methods of chemical analysis such as infrared, raman and emission spectroscopy, polarography, high performance liquid chromatography, radiochemical analysis etc. (Normally, credit cannot be obtained for 318 and 316 or 317.) (*Prerequisite:* 213 and 312) S(3-3)

CHEM 323 (1½) INTRODUCTION TO ORGANOMETALLIC CHEMISTRY
Structure and reactivity of organometallic compounds of the *s* and *p* block metals. Transition metal carbonyl chemistry. Hydrocarbon complexes of the transition metals: M.O. description of bonding, reactivity of coordinated polycycloolefins. Transition metal alkyls and allyls, insertion and oxidative addition reactions, organotransition metal complexes in catalysis. (*Prerequisite:* Chemistry 222) S(3-3)

CHEM 324 (1½) INTRODUCTION TO TRANSITION METAL CHEMISTRY
Introduction to transition metal and coordination chemistry. Electronic structure of transition metal complexes (crystal and ligand field theory). Chemistry of the first row transition elements from titanium to zinc. (*Prerequisite:* 222) F(3-3)

CHEM 335 (1½) SYNTHETIC METHODS IN ORGANIC CHEMISTRY
Spectroscopy, design of syntheses in aliphatic, aromatic and some biomolecules. Aliphatic systems; carbanions, conjugated carbonyl compounds, amines in syntheses, functional group modifications. Aromatic systems; aromatic substitution processes, reactive substrates (phenols, amines), polynuclear aromatics. Biomolecules: synthesis and modification of heterocycles and carbohydrates. (CHEM 335 and 338 may be taken in either order.) (Prerequisite: 213 and 235, or 232 with permission of the Department) S(3-3)

CHEM 336 (1½) INTRODUCTORY POLYMER CHEMISTRY
Principles and practice of polymerization, copolymerization and basic polymer kinetics. Structure property relationships for typical organic polymer groups. Polymer technology. The laboratory is designed to acquaint students with procedures for polymer identification, polymerization/depolymerization process, determination of physical properties, and simple fabrication. (*Prerequisite:* 232 or 235) F(3-3)

CHEM 337 (1½) BIO-ORGANIC CHEMISTRY
Survey of electronic and medium effects on reactivity. Catalysis of organic reactions. Bio-organic reaction mechanisms and biomimetic model systems. (*Prerequisite:* 235, or 232 with permission of the department. *Pre- or corequisite:* 213) F(3-3)

CHEM 338 (1½) SELECTED TOPICS IN ORGANIC STRUCTURE AND REACTIVITY
Introduction to structural effects on reactivity. Qualitative molecular orbital theory. Pericyclic reactions, organic photochemistry and radical reactions. (335 and 338 may be taken in either order). (*Prerequisite:* 235, or 232 with permission of the Department. *Pre- or corequisite:* 213) F(3-3)

CHEM 345 (1½) THERMODYNAMICS, SOLUTIONS AND ELECTROCHEMISTRY
Chemical thermodynamics. Properties of solutions. Electrochemistry. (CHEM 345 and 346 may be taken in either order.) (*Prerequisites:* 245 and MATH 200) S(3-3)

CHEM 346 (1½) GASES, LIQUIDS AND CHEMICAL KINETICS
Properties of gases and liquids. Kinetic molecular theory. Phase equilibria. Chemical kinetics. (CHEM 345 and 346 may be taken in either order.) (*Prerequisites:* 245 and MATH 200) FK(3-3)

CHEM 399 (1) RESEARCH PARTICIPATION AND SEMINAR
Introduction to Departmental research. Seminar report. For Chemistry Honours students only. (Grading: COM, N, or F) F(3-0)

CHEM 411 (1½) ADVANCED INSTRUMENTAL ANALYSIS
Advanced topics in instrumental analysis which will include some of the following: mass spectrometry, x-ray spectroscopy, advanced electrochemical methods, EPR, etc. Included will be a discussion of electronic data acquisition and manipulation as used in modern chemical instrumentation. (*Prerequisite:* 318, or 316 and 317) S(3-3)

CHEM 424 (1½) ADVANCED TRANSITION METAL CHEMISTRY
A more advanced consideration of transition metal chemistry designed to build on the principles established in Chemistry 323 and 324. Emphasis will be given to the chemistry of 2nd and 3rd row transition elements together with special topics chosen from areas of current research interest. (*Prerequisites:* 323 and 324) S(3-3)

CHEM 425 (1½) PHYSICAL INORGANIC CHEMISTRY
Applications of group theory in inorganic chemistry. Molecular orbital theory and electronic spectra of transition metal complexes. Kinetics and mechanisms of inorganic reactions. (*Prerequisites:* 213 and 324) (Not open for credit to students with credit in 325 or 422) FK(3-3)

CHEM 433 (1½) ORGANIC STRUCTURE DETERMINATION: THE CHEMISTRY OF NATURAL PRODUCTS
Elucidation of the structures of organic compounds from spectral information. The chemistry of several classes of natural products, including examples demonstrating structural elucidation, synthesis, and biogenesis. (*Prerequisites:* 335 and 338) FK(3-3)

CHEM 434 (1½) PHYSICAL ORGANIC CHEMISTRY
Mechanisms of organic reactions. Reactive intermediates. Structural and solvent effects on reactivity. (*Prerequisites:* 335 and 338) S(3-3)

CHEM 444 (1½) ADVANCED PHYSICAL CHEMISTRY
Mathematical treatment of chemical processes; statistical thermodynamics, theories of reaction and their application to solution and gas phase reactions. Theory of electrolyte solutions. Electrode kinetics. Thermodynamics and phenomenology of surfaces. Heterogeneous

catalysis. Colloidal systems. (*Prerequisites:* 345 and 346 and MATH 200) S(3-3)

CHEM 446 (1½) QUANTUM CHEMISTRY
The basic principles of quantum mechanics and their application to simple physical models and to chemical systems, including the use of semiempirical methods. Molecular spectroscopy and symmetry. (*Prerequisites:* 213 and 245, and MATH 201) F(3-3)

CHEM 490 (1½) DIRECTED STUDIES
In special cases the Department of Chemistry may give permission for individual studies and directed readings to be taken as 490. CHEM 490 may be taken more than twice only in different areas of chemistry.

490A Readings in Analytical Chemistry
490B Studies in Analytical Chemistry
490C Readings in Inorganic Chemistry
490D Studies in Inorganic Chemistry
490E Readings in Organic Chemistry
490F Studies in Organic Chemistry
490G Readings in Physical Chemistry
490H Studies in Physical Chemistry
490J Readings in Theoretical Chemistry
490K Studies in Theoretical Chemistry

CHEM 499 (3) THESIS

Experimental research under the direction of faculty. This course is designed primarily for Chemistry Honours students, but Chemistry Major students may be granted permission by the Department to take the course as an elective. (Grading: INP; letter grade) (0-6;0-6)

DEPARTMENT OF CLASSICS

Peter L. Smith, B.A. (Brit. Col.), M.A., Ph.D. (Yale), Professor and Chair of the Department
Keith R. Bradley, B.A., M.A. (Sheff.), B.Litt. (Oxon.), Professor
David A. Campbell, M.A. (Glas.), M.A. (Oxon.), F.R.S.C., Professor
John G. Fitch, B.A., M.A. (Cantab.), Cert.Ed. (Leeds), Ph.D. (Cornell), Professor
John P. Oleson, B.A., M.A., Ph.D. (Harv.), Professor
Samuel E. Scully, B.A., M.Litt. (Brist.), Ph.D. (Tor.), Associate Professor
Gordon S. Shrimpton, B.A., M.A. (Brit. Col.), Ph.D. (Stan.), Associate Professor
Ingrid E. Holmberg, B.A. (Ver.), M.A., Ph.D. (Yale), Assistant Professor

Visiting and Adjunct Appointments:
Dennis R. Lamb, B.A., M.A. (Calif. - Santa Barb.), Ph.D. (Wash.), Visiting Assistant Professor (1990-91)
Nada Conic, B.A., M.A. (Tor.), Visiting Lecturer (1989-91)
M. Michele George, B.A. (Tor.), M.A. (McM.), Visiting Lecturer (1991-92)
Carl G. Johnson, B.A. (Brit.Col.), M.A. (Tor.), Visiting Lecturer (1991-92)
Susan Petrakis, B.A. (Calif.-Berk.), Visiting Lecturer (1990-91)

GRADUATE PROGRAMS

For information on studies leading to the M.A. degree, see page 243.

GENERAL, MAJOR AND HONOURS PROGRAMS

The Department of Classics offers the student an opportunity to study Classics at any of three levels of concentration: General, Major and Honours Programs.

The General Program does not necessarily involve language study. The Major and Honours Programs do include the study of classical languages. For the Major and Honours Programs, the Department accommodates three kinds of emphasis in the study of classical languages: ancient Greek, Latin, and Classics (study of both Latin and Greek). It is supposed that students following the General or Major Program will be taking advanced courses in other departments. Students following an Honours Program with the Classics Department should note that it may be possible for them to complete an honours program in another field, if they have the joint consent of that department and the Department of Classics.

Students are welcome at any time to discuss their programs with members of the Department and are encouraged to do so as early as possible in the course of their studies at the University. The planning of one's program is important, since failure to complete prerequisites for advanced courses may seriously limit the type of degree open to a student.

General:

(a) 3 units of Departmental offerings normally at the 100 or 200 level.
(b) 9 units of Departmental offerings numbered 300 or above.

Major in Classical Studies:

(a) 6 units of Greek and/or Latin language at the 100 or 200 level.
(b) 3 units of Classical Studies normally at the 100 or 200 level.
(c) 9 units of Classical Studies at or above the 300 level.
(d) 6 units of Departmental offerings (i.e. language courses or classical studies) at or above the 300 level.
24 Total

Major in Classical Studies: Ancient History Emphasis

(a) 6 units of Greek and/or Latin language at the 100 or 200 level.
(b) 3 units of Classical Studies normally at the 100 or 200 level.
(c) 12 units of Ancient History as follows:
CLAS 330, 480A and 490;
CLAS 340, 480C and 491.
(d) 3 units of Departmental offerings at or above the 300 level.
24 Total

N.B.Students interested in majoring in Classical Studies: Ancient History Emphasis are urged to consult the Majors adviser in their first year if possible. Majors must obtain the adviser's approval for their third and fourth year programs.

Major in Classics:

1. Greek Emphasis:
(a) GREE 100
(b) GREE 200
(c) GREE 300 (corequisite or prerequisite for other advanced Greek courses).
(d) 3 units of Departmental offerings normally at the 100 or 200 level.
(e) 6 units of Greek or 3 of Latin and 3 of Greek at or above the 300 level.
(f) 6 units of Departmental offerings (i.e. language courses or classical studies) at or above the 300 level.
24 Total

2. Latin Emphasis:
(a) LATI 100
(b) LATI 200
(c) LATI 300 (corequisite or prerequisite for other advanced Latin courses).
(d) 3 units of Departmental offerings normally at the 100 or 200 level.
(e) 6 units of Latin or 3 units of Latin and 3 of Greek at or above the 300 level.
(f) 6 units of Departmental offerings (i.e. language courses or classical studies) at or above the 300 level.
24 Total

Honours:

Students who are of good general standing, and who have achieved a first class or high second class standing in Latin and/or Greek at the 100 and 200 level, may be admitted, with Departmental permission, into an intensified Honours program. The Honours program features the core courses LATI/GREE 300 and 400. These courses combine reading with advanced study of grammar and syntax. Translation at sight will be done regularly, and some composition may be undertaken.

First and Second Years:

(a) GREE 100
(b) LATI 100
(c) LATI and/or GREE 200

NOTE: CLAS 100 is strongly recommended; ENGL 121, 122 and any English course at 200 level are recommended.

Third and Fourth Years:

Required courses in the Third and Fourth years will normally not exceed 24 units out of the total program of 30-36 units. Requirements listed below may be completed in any year by a student who has the prerequisites.

Greek Honours:

(a) GREE 300
(b) GREE 400
(c) 9 additional units in Greek numbered above 300
(d) LATI 300
(e) CLAS 330 or 3 units of History chosen from GREE 390, 490 and CLAS 480A.

Latin Honours:

(a) LATI 300
(b) LATI 400
(c) 9 additional units in Latin numbered above 300
(d) GREE 300
(e) CLAS 340 or 3 units of History chosen from LATI 390, 490 and CLAS 480C.

Classics Honours:

(a) GREE 300
(b) GREE 400
(c) LATI 300
(d) LATI 400
(e) 9 additional units in Greek and/or Latin at or above the 300 level.
(f) CLAS 330 or 3 units of Greek History chosen from GREE 390, 490 and CLAS 480A.
(g) CLAS 340 or 3 units of Roman History chosen from LATI 390, 490, and CLAS 480C.

NOTE: It is recommended that all graduating Honours students acquire a reading knowledge of German, French, or Italian.

To obtain a First Class Honours Degree a student must achieve (1) a graduating average of at least 6.50, (2) a grade point average of at least 6.50 in those Departmental courses at the 300 and 400 level that are required for the degree program, and (3) a grade of at least B+ in any *required* 400 level language course.

To obtain a Second Class Honours Degree a student must achieve (1) a graduating average of at least 3.50, (2) a grade point average of at least 3.50 in those Departmental courses at the 300 and 400 level that are required for the degree program, and (3) a grade of at least C+ in any *required* 400 level language course.

A student who fails to meet Departmental requirements for first class standing in the Honours program but has a first class graduating average will be offered the choice between Second Class Honours and a First Class Major Degree. A student who fails to meet Departmental requirements for second class standing but has a second class graduating average will be offered a Second Class Major Degree.

Directed Reading/Study Courses

Subject to the availability of faculty and in consideration of student demand, the above courses will be offered from time to time under the designated headings A, B, C, etc. in the regular winter session. Outstanding students who may wish to undertake these courses as Summer Studies courses should apply to the Department for permission. Each subdivision of Greek and Latin 390 and 490 is considered a distinct course and cannot be taken twice for credit. Students who wish to explore an area of ancient literature in some depth should choose carefully from Departmental offerings.

UNDERGRADUATE COURSES

CLASSICAL STUDIES

A knowledge of the Greek and Latin languages is not required for the following courses.

CLAS 100 is designed primarily as an elective for students in all fields. Any student in Second Year who has successfully completed 100 should take either a course in Latin or Greek or a Classical Studies course at the 200 or 300 level. *First Year students may take Classical Civilization courses above the 200 level only with Department permission. Any student in Second Year may register for courses in Classical Studies at the 300 level. CLAS 100 may not be taken by students who have already received credit for any courses in Classical Studies at the 300 level.*

Appropriate credit in the Department of History may be given for CLAS 330 or 340 or 480A or 480C. PHIL 421 and 422 are acceptable for credit in all programs in the Department of Classics in lieu of any 400 level course in Classical Studies.

(Course offering codes: Y = Sept.-Apr., F = Sept.-Dec., S = Jan.-Apr., K = May-Aug., NO = Not offered, this session)

CLAS 100 (3) GREEK AND ROMAN CIVILIZATION

An approach to the civilization of Greece and Rome through the evidence of literature, history, and archaeology. Attention will be focused upon those aspects of ancient cultural and intellectual growth that are of significance in the western tradition. Emphasis will be placed upon the Minoan and Mycenaean civilizations, 5th century Athens, and Augustan Rome. Essays will be required and there will be a written examination. Readings will include Homer's *Iliad* and *Odyssey*, selections from Herodotus and Thucydides, Sophocles' *Oedipus The King* and other representative Greek dramas, selected dialogues of Plato, Livy, *The Early History of Rome,* Vergil's *Aeneid* and part of Ovid's *Metamorphoses*, and other representative texts. Y(3-0)

CLAS 200 (1½) MYTHOLOGY OF GREECE AND ROME

A study of the origins of classical myth, its expression in the literature and art of ancient Greece, and its further development in the Roman experience. Topics will include cosmic and divine myth; heroic saga; the influence of classical myth on later European culture. Consideration will be given to various modern systems of analysis and interpretation. Texts: Hesiod, *Theogony;* Euripides, *Bacchae;* Ovid, *Metamorphoses*; Morford and Lenardon, *Classical Mythology*
C.G. Johnson F(3-0)

CLAS 250 (1½) THE CONTRIBUTION OF GREEK AND LATIN TO THE ENGLISH LANGUAGE

Out of 20,000 common words in English, 10,000 came from Latin directly or through French. The Greek element is also impressive, particularly in the ever-expanding vocabulary of science. Among topics studied will be the Greek script, principles of transliteration, the formation of nouns, adjectives and verbs, hybrid words, neologisms and semantic changes.
P.L. Smith S(3-0)

CLAS 300 (1½) CLASSICAL EPIC

A study of Greek and Roman epic poetry. Particular attention will be paid to the *Iliad* and *Aeneid*. Students will be expected to read the *Odyssey*; one other work (or selections from several authors) will also be studied. *Prerequisite:* 100 or permission of the Department).
P.L. Smith F(3-0)

CLAS 301 (formerly 201) (1½) TRADITION AND ORIGINALITY IN CLASSICAL LITERATURE

A comparative study of the content and form of major works by Greek and Roman writers. The course will concentrate on the important genre of didactic poetry, together with one or more genres to be chosen from the following: biography, philosophy, lyric poetry, tragedy, pastoral poetry, oratory. The following will be among the topics discussed: What part does imitation or the adaptation of traditional material play in classical literature? How can a creative writer be original while working within a strong tradition? Texts for didactic: Hesiod, *Works and Days*; Lucretius, *The Ways Things Are*; Vergil, *Georgics*; Ovid, *The Art of Love.* Texts for other genres: to be announced. S(3-0)

CLAS 320 (1½) GREEK TRAGEDY

The origins and developments of tragic drama in ancient Greece. The study, in English translation, of representative plays of Aeschylus, Sophocles and Euripides. (*Prerequisite:* None; 100 or 200 or 301 recommended) NO(3-0)

CLAS 322 (formerly part of 321) (1½) GREEK AND ROMAN DRAMA
Special attention will be given to the various forms of Greek comic and nontragic drama and their development in the Roman world. Major emphasis will be on Aristophanes, Euripides, Menander, Plautus and Terence. Study of Roman drama may include analysis of representative plays of Seneca. (*Prerequisite:* None; 100 or 200 or 301 or 320 recommended) NO(3-0)

CLAS 330 (3) GREEK HISTORY
A survey of Greek history from the Bronze Age to the death of Alexander, with special emphasis on the political, economic, and cultural achievements of the 5th and 4th centuries. Texts: Bury-Meiggs, *A History of Greece*; Plutarch, ed. E. Fuller, *The Rise and Fall of Athens*; Herodotus, *The Histories*; Thucydides, *The History of the Peloponnesian War*
G.S. Shrimpton Y(3-0)

CLAS 335 (1½) WOMEN AND THE FAMILY IN CLASSICAL ANTIQUITY
A survey of Greek and Roman attitudes towards the place of women and the family in ancient society, and comparison of traditional ideas with historical reality; particular topics studied will depend on the interests of the instructor, but may include the following: the role of women in law, religion, and the economy; family structure and concepts of love and affection; marriage and childbearing practices. (*Prerequisite:* None; 100 or 300 or 340 recommended) Texts: Readings from Greek and Roman authors in translation, and secondary sources recommended by the instructor
K.R. Bradley F(3-0)

CLAS 340 (3) ROMAN HISTORY
A survey of Roman history from earliest historical times until the age of Constantine. Emphasis falls on the creation of Rome's empire, the transition from government by senate to rule by emperor, and the nature of Roman imperialism. NO(3-0)

CLAS 345 (1½) SLAVERY IN THE ROMAN WORLD
Introduction to the fundamental importance of slavery as a component part of Roman society from c.250 B.C. to c.A.D. 300, a period in which Rome was a true slave society. Representative texts from classical authors will be examined in order to ascertain the main characteristics of Roman slavery; and students will be expected to conduct their own research topics. Some comparison of ancient (Greek and Roman) with modern slavery will be encouraged. NO(3-0)

CLAS 346 (1½) ROMAN LAW AND SOCIETY
An introduction to Roman law in its social context. Beginning with an outline of the sources and the historical development of Roman law, the course will give detailed attention to such aspects of Roman private law as the law of persons, property, marriage, labour, slavery and commerce. The emphasis throughout will be on the impact of law on Roman social relations. Attention will also be given to trial procedures in criminal cases, and the role of law in Roman public life. (*Prerequisite:* None, but 340 recommended) NO(3-0)

CLAS 371 (H A 316) (1½) ART AND ARCHITECTURE OF ANCIENT GREECE AND THE AEGEAN
An introduction to art and architecture in Greece and the Aegean from the Early Bronze Age through the Hellenistic period. Architecture, sculpture, and the minor arts are examined as evidence for cultural attitudes towards humankind, the gods, the physical world, and the exploration of form, color, and movement. Emphasis is placed on the careful discussion of selected monuments illustrated through slides, casts, and photographs. (No prerequisite)
J.P. Oleson F(3-0)

CLAS 372 (H A 317) (1½) ART AND ARCHITECTURE OF THE ROMAN WORLD
A survey of Roman art and architecture relating the political and social development of the Roman people to their artistic expression. After an examination of Etruscan art and architecture for its formative influence on Roman attitudes, Republican and Imperial Roman art are discussed in the context of historical events. Topics include the special character of Roman art, Hellenized and Italic modes of expression, portraiture, historical reliefs, function in art, architectural space and city planning. (No prerequisite)
M.G. George S(3-0)

CLAS 375 (1½) CITIES AND SANCTUARIES OF THE ANCIENT WORLD
An examination of selected Greek, Etruscan and Roman city and sanctuary sites in an evaluation of ancient achievements in sacred and secular architecture, urban planning, and sanctuary development. Emphasis will be placed on the changing response to human needs for an artificial framework for living, along with the natural resources of the environment in antiquity. Each site will be examined by means of illustrated lectures, and careful consideration will be given to both the archaeological record and the ancient literary sources. (Offered alternately with 376)
M.G. George F(3-0)

CLAS 376 (1½) ANCIENT SCIENCE AND TECHNOLOGY
An introduction to the scientific thought of the Greek and Roman world with special reference to applied technology. Evidence will be drawn from both ancient authors and archaeological remains from the Archaic period through the late Empire, with emphasis on the growth and capabilities of Roman Technology. Special topics will include machinery and gadgets, mass production, engineering, nautical technology, labour, medicine, and geography. (Offered alternately with 375) NO(3-0)

CLAS 379 (PHIL 379) (1½) EARLY GREEK HISTORICAL AND PHILOSOPHICAL THOUGHT
An investigation into the formation in Archaic and Classical Greece of such key concepts as rationality, causality, the nature-convention antithesis, law and equality, and female inferiority. These will be considered within the context of the society (from Hesiod to Herodotus) in which they evolved. The course does not presuppose a background in either classics or philosophy. NO(3-0)

CLAS 380 (1½) THE LIFE AND TIMES OF SOCRATES
An examination of a critical moment in Greek intellectual and political life, as seen from various points of view. Topics include: the teaching methods of Socrates and the Sophists, the political background of his trial, the religious and social questions involved, and types of Socratic literature. The approach to the course will not be primarily philosophical; rather, an attempt will be made to see why his challenge to conventional Athenian morality so deeply influenced his fellow citizens, and to explain why he appears as one of the most fascinating personalities of world history. Texts: Aristophanes *Clouds*, Plato *Euthyphro, Apology, Crito, Protagoras,* Xenophon *Memoirs of Socrates* and selections from other authors. NO(3-0)

CLAS 381 (1½) ANCIENT RELIGIONS
An introduction to classical religious thought and behaviour, with particular reference to Roman beliefs and practices. Topics will be selected by the instructor but will usually include traditional Roman religion, exotic cults in the Late Republic and Early Empire (e.g. Mithraism, Isis worship), and the rise of Christianity. Texts: Readings from Greek and Roman sources in translation, and secondary sources recommended by the instructor.
K.R. Bradley S(3-0)

CLAS 480 (1½) SEMINAR IN ANCIENT HISTORY AND ARCHAEOLOGY
The Department will offer no more than two of the following each year: 480A Seminar in Greek History; 480B Topics in Greek Art and Archaeology; 480C Seminar in the History of the Roman World; 480D Topics in Roman Art and Archaeology. (*Pre-or corequisite:* for 480A, 330; for 480B, 371; for 480C, 340; for 480D, 372; *or*, in each case, permission of the Department)

480A NO(2-0)
480B NO(2-0)
480C S(2-0)
480D F(2-0)

CLAS 490 (1½) DIRECTED STUDY IN GREEK HISTORY
Intensive study of certain problems in Greek history. Students will be expected to prepare an extended research paper, drawing on both primary and secondary sources. Introduction to epigraphy, numismatics, and papyrology where appropriate. (2-0)

CLAS 491 (1½) DIRECTED STUDY IN ROMAN HISTORY
Intensive study of certain problems in Roman history. Students will be expected to prepare an extended research paper, drawing on both primary and secondary sources. Introduction to epigraphy, numismatics and papyrology where appropriate. (2-0)

CLAS 492 (1½) DIRECTED STUDY IN CLASSICAL ARCHAEOLOGY
Intensive study of selected problems in Classical Archaeology. Introduction to theory and techniques, with a focus on specific regions, periods, or cultures, according to student needs. Students are expected to prepare an extended research paper, drawing on excavation reports, ancient written sources, artifacts, and modern analyses, as appropriate. (2-0)

CLAS 495 (3) ARCHAEOLOGY FIELD WORK SEMINAR
An introduction to the methods and techniques of Classical Archaeology through participation in an excavation; introductory lectures will be arranged. (*Prerequisite:* Permission of the Department. Interested students should contact the department during the Winter Session.) Texts: Texts and requirements to be determined by the instructor according to circumstances of the excavation and student preparation NO(3-3)

GREEK

GREE 100 (3) BEGINNERS' GREEK
A basic introduction to the Greek language, including the following: the three declensions of the noun; the regular, irregular and contracted verbs; a survey of verbs in *mi*; the main constructions; practice in translating sentences into Greek; sight translation. Tests and examinations will be given during the course of the year. Texts: *Reading Greek: Text* and *Grammar, Vocabulary and Exercises*
I.E. Holmberg Y(4-0)

GREE 200 (3) GREEK LANGUAGE AND LITERATURE: I
The emphasis will be on increased understanding of the language through a reading of selected authors. Example: Homer, Herodotus and Euripides. (*Prerequisite:* 100 or its equivalent) Texts: *Reading Greek: Text* and *Grammar, Vocabulary and Exercises; A World of Heroes*; Liddell and Scott, *Intermediate Greek-English Lexicon;* Goodwin and Gulick, *Greek Grammar*
G.S. Shrimpton Y(4-0)

GREE 250 (1½) NEW TESTAMENT GREEK
A study of the language of the New Testament. Selections from the Gospels and from *Acts of the Apostles* will be read. (*Prerequisite:* 100) Text: *The Greek New Testament*, ed. Aland, Black, et al. (United Bible Societies) NO(3-0)

GREE 300 (3) GREEK LANGUAGE AND LITERATURE: II
The basic third year course for Major and Honours students; advanced Greek students may take the course in their second year. Selected texts (to be varied to some extent from year to year) will be studied from prose and verse authors. Considerable emphasis will be placed on the ability to translate with accuracy and imagination, particularly from Greek into English. Unprepared translation will be included in the final examination. (*Prerequisite:* 200) Texts: The readings alternate on a two year cycle. In year A, readings are taken from the advanced volumes of the Cambridge reading program; in year B, there will be selections from: Sophocles, *Oedipus Tyrannus*, Euripides, *Medea*, Thucydides, *History*, Plato, *Dialogues*
(NOTE: 300 will be taught together with 400.)
C.G. Johnson Y(3-0)

GREE 390 (1½) GREEK AUTHORS
Extensive reading and analysis of major Greek texts. The Department will offer no more than two of the following each year; 390A Homer; 390B Greek Tragedy; 390C Herodotus; 390D Xenophon. (*Prerequisite:* 200)
390A: I.E. Holmberg F(3-0)
390B: NO(3-0)
390C: G.S. Shrimpton S(3-0)
390D: NO(3-0)

GREE 400 (3) GREEK LANGUAGE AND LITERATURE: III
The basic fourth year course for Honours students. Sight translation will be regularly practised, and unprepared translation will be included in the final examination. (*Prerequisite:* 300) Texts: see 300 (NOTE: Although this course will be taught together with Greek 300, there will be separate evaluative procedures.)
C.G. Johnson Y(3-0)

GREE 490 (1½) DIRECTED STUDIES IN GREEK
Depending on the students' interests and on the availability of a supervising instructor, one or more of the following topics may be offered: 490A Homeric Corpus and Hesiod; 490B Greek Lyric Poetry; 490C Greek Tragedy; 490D Greek Comedy; 490E Greek Historians and Rhetoricians; 490F Greek Philosophical Prose. (May be taken more than once for credit in different topics) (*Prerequisite:* Completion of at least 3 units of Greek at the 300 level or above, and Department permission) (2-0)

LATIN

Students with no previous study of Latin or one year of high school Latin will register for LATI 100. Students with two or three years of high school Latin will normally register for LATI 200. All students who have taken high school Latin should consult the Department before enrolling in any Latin course.

LATI 100 (3) BEGINNERS' LATIN
No previous knowledge of Latin is required. An introduction to the Latin language with easy readings from Roman authors. Y(4-0)

All work at the 200 level or beyond will require a *Cassell's New Latin Dictionary* and Allen and Greenough, *New Latin Grammar.*

LATI 200 (3) LATIN LANGUAGE AND LITERATURE: I
The emphasis will be on an increased understanding of the language through a reading of the authors. (*Prerequisite:* 100 or equivalent)
P.L. Smith, J.G. Fitch Y(4-0)

LATI 250 (MEDI 250) (1½) MEDIEVAL LATIN
After an introduction to medieval Latin grammar, the course will explore the varied tradition of medieval Latin literature, from St. Augustine's *Confessions* to Petrarch's letters, from theological discourses to drinking and love songs, from crusade chronicles to ghost stories. Passages will be read and discussed in the context of medieval culture and society. (*Prerequisite:* LATI 100 or its equivalent; *corequisite:* LATI 200 or permission)
E.F. Archibald S(3-0)

LATI 300 (3) LATIN LANGUAGE AND LITERATURE: II
The basic third year course for Major and Honours students; advanced Latin students may take the course in their second year. The aims will include the development of critical judgement and the appreciation of literary style, through the study of major writers in Latin poetry and prose. Considerable emphasis will be placed on the ability to translate with accuracy and imagination, particularly from Latin into English. Students will be expected to practise reading aloud from the authors selected, and may be examined on their competence. Unprepared translation will be included in the final examination. (*Prerequisite:* 200) Texts: The readings alternate on a two year cycle. Year A, Cicero, *Pro Caelio*, Horace, *Odes*, Tacitus (selections), Juvenal, *Satires* 1, 3 and 10. Year B, selections from Cicero's *Letters*, Lucretius, *De Rerum Natura*, Ovid, and Seneca Y(3-0)
(NOTE: 300 will be taught together with 400.)

LATI 390 (1½) LATIN AUTHORS
Extensive reading and analysis of major Latin texts. The Department will offer no more than two of the following each year: 390A Vergil, *Eclogues and Georgics*; 390B Vergil, *Aeneid*; 390C Horace; 390D Roman Historians. (*Prerequisite:* 200)
390A: J.P. Oleson F(3-0)
390B: NO(3-0)

390C: P.L. Smith S(3-0)
390D: NO(3-0)

LATI 400 (3) LATIN LANGUAGE AND LITERATURE: III

The basic fourth year course for Honours students. The aims will be similar to those of LATI 300, on a more advanced level. There will be examinations of syntax, metre and stylistics. Sight translation from more difficult authors will be regularly practised, and unprepared translation will be included in the final examination. (*Prerequisite:* 300) Texts: see 300 (NOTE: Although this course will be taught together with 300, there will be separate evaluative procedures.) Y(3-0)

LATI 490 (1½) DIRECTED STUDIES IN LATIN

Depending on the student's interests and on the availability of a supervising instructor, one or more of the following topics may be offered: 490A Roman Comedy and Satire; 490B Roman Philosophical Literature; 490C Prose Authors of the Late Republic; 490D Late Republican and Augustan Poetry; 490E Post-Augustan Poetry; 490F Roman Historians; 490G Post-Augustan Prose. (May be taken more than once for credit in different topics) (*Prerequisite:* Completion of at least 3 units of Latin at the 300 level or above, and permission of the Department)

(2-0)

COMPUTER SCIENCE

The main Calendar entry for the Department of Computer Science is located on pages 190-191 in the Faculty of Engineering section of this Calendar.

The Department of Computer Science offers programs of study leading to the following degrees:

- Faculty of Engineering: B.Sc. Major or Honours in Computer Science;
- Faculty of Arts and Science: B.Sc. Major or Honours in Combined Computer Science and Mathematics; B.A. or B.Sc. General Degree in Computer Science;
- Faculty of Graduate Studies: M.A., M.Sc., Ph.D.

For details of graduate programs in Computer Science, see page 244. For undergraduate courses, see page 196.

LIMITATION OF ENROLLMENT

Students are advised that, because of limited facilities and staff it may be necessary to limit enrollment in certain Computer Science courses. Enrollment in Computer Science 100, 110, 112, 115 and 200 will be on a first come, first served basis. Enrollment limits in all other courses will be imposed where necessary on the basis of facilities available and academic standing in prerequisite courses. Students are warned that achieving the minimum academic standing outlined in specific course descriptions does not guarantee entry into those courses. Students with a B- or higher grade in prerequisite courses will in most instances have no difficulty gaining admission to following courses.

UNDERGRADUATE PROGRAMS

Undergraduate courses offered by the Department of Computer Science may be taken by all students in the Faculty of Arts and Science for credit toward a degree in this Faculty.

All first year students wishing to complete a degree in Computer Science register in the Faculty of Arts and Science. Students planning to complete a Major or Honours degree in Computer Science register in the Faculty of Engineering upon declaring their degree program. Students planning to complete one of the Combined degree programs offered by Computer Science and Mathematics, or a General program involving Computer Science, continue to be registered in the Faculty of Arts and Science. Students planning to complete a double Major or double Honours degree in Computer Science and another discipline may choose to register in the Faculty of Engineering or the Faculty of the other discipline.

Students planning to complete a degree with a Computer Science designation must inform the Department of this fact before registering for third year by completing a Degree Intention Form which may be obtained from the Computer Science Coop/Advising Office. They must also file a Record of Degree Program form before registering for third year in the Faculty of Engineering or during third year in the case of the Faculty of Arts and Science. For the Faculty of Arts and Science, Degree Programs are submitted to the Arts and Science Advising Centre. For the Faculty of Engineering, Computer Science Degree Programs are submitted to the Computer Science Coop/Advising Office.

MAJOR AND HONOURS DEGREE REQUIREMENTS

The requirements for the Major and Honours B.Sc. degree in Computer Science are found in the Engineering section of this Calendar.

GENERAL DEGREE REQUIREMENTS

Year	
I	C SC 112/115[1] MATH 100/101 or 102/151
II	C SC 225/230/275 MATH 224 STAT 250 or 254 or ECON 340
III & IV	A total of nine additional units of Computer Science courses numbered 300 or higher.

[1] Students without a grade of A in Computer Science 12 are also required to take 110.

Students in the Faculty of Arts and Science may complete a minor in Computer Science by completing the General program requirements in conjunction with the Major program requirements in another Department in the Faculty.

COMBINED PROGRAMS IN COMPUTER SCIENCE AND MATHEMATICS

For a B.Sc. degree in Combined Computer Science and Mathematics, students may take a Major or Honours program. These programs are not joint degrees in Computer Science and Mathematics, but a single degree program composed of a selected combination of courses from each of the departments. Students opting for either of these combined programs must contact the Computer Science and Mathematics and Statistics Departments and each student will be assigned an adviser from each of these departments. Students considering proceeding to graduate work in either Computer Science or Mathematics must consult with their advisers prior to making their final choice of courses.

Students who wish to be admitted to the Combined Honours program should apply in writing to the Chairs of the Departments on completion of their second year. Normally a student will be admitted to the Combined Honours program only if the student meets the following conditions: completion of C SC 112, 115, 225, 230, and 275; completion of at least 10.5 units of the Mathematics and Statistics courses required for the degree; attainment of a grade of at least B+ in all 200 level Computer Science courses; attainment of a grade point average of at least 6.50 in all 200 level Mathematics and Statistics courses.

Students may also apply and be admitted to the Combined Honours program upon completion of their third year providing:

(i) they have completed all of the 100 level and 200 level courses required for the Combined Honours degree with a grade point average of at least 6.00 in these courses, and
(ii) they have completed at least 4.5 units of 300 level courses in Computer Science (including C SC 320 and 349A) and 4.5 units in Mathematics (including MATH 333A and 334) and have obtained a grade point average of at least 6.00 in all 300 level Computer Science, Mathematics, and Statistics courses taken.

Honours students are expected to maintain a grade point average of at least 5.00 in their third year to remain in the program.

A student graduating in the combined Honours program will be recommended for a First Class Honours degree if the student

achieves a first class graduating average.

A student who does not obtain a grade point average of 6.50 will be recommended for a Second Class Honours degree if the student achieves a graduating average of at least 5.00.

Combined Programs in Computer Science and Mathematics

Year	B.Sc. Major		B.Sc. Honours	
I	C SC 112/115[1]	(3)	C SC 112/115[1]	(3)
	MATH 100/101	(3)	MATH 100/101	(3)
	ENGL 115	(1½)	ENGL 115	(1½)
	ENGR 240[2]	(1½)	ENGR 240[2]	(1½)
	Electives	(6)	Electives	(6)
II	C SC 225/230/275	(4½)	C SC 225/230/275	(4½)
	MATH 200/201/224 /233A/233C	(7½)	MATH 200/201/224 /233A/233C	(7½)
	STAT 250[3]/251	(3)	STAT 250[3]/251	(3)
III	C SC 320/349A/349B	(4½)	C SC 320/349A/349B	(4½)
	MATH 324/330A /330B/333A	(6)	MATH 324/333A/333C /334/336/338	(9)
	One of MATH 333C /422/423	(1½)	Other courses[5]	(1½)
	Other Courses[4]	(3)		
IV	Other Courses[4]	(15)	Two of C SC 425 /448A/449A/449B	(3)
			Other Courses[5]	(12)

[1] Students without a grade of A in Computer Science 12 are also required to take 110.

[2] ENGL 225 can replace ENGR 240 but this requires 3 units of first year English.

[3] STAT 250 may be taken in the second term of the first year.

[4] These 18 units of other courses must include at least 10½ units from the Departments of Computer Science and Mathematics and Statistics at the 300 level or above, with at least 6 of these units at the 400 level. In selecting these courses, students are urged to take at least 3 of these units in each of the two departments.

[5] These 13½ units of other courses must include at least 3 units at the 300 level or above and 6 units at the 400 level from the Departments of Computer Science and Mathematics and Statistics (to include at least 3 units from the Department of Mathematics and Statistics at the 400 level).

NOTES:

(1) All students taking a degree in Computer Science are strongly advised to take some University courses outside the Computer Science and Mathematics and Statistics Departments.

(2) Any students who demonstrate to the Department that they have mastered the material of a course may be granted advanced placement.

(3) Students from outside British Columbia, students transferring from community colleges and students who have obtained credit for Grade XIII Mathematics must consult the Department before enrolling in any Computer Science course.

(4) In each line below students may obtain credit for only one Computer Science course.

240 or 340
225 or 325
370 or 470
425 or 420
435 or 471
455 or 460

(5) Students wishing to complete a degree in Computer Science with transfer credit for 110 and 115 or 115 and 230 will normally take 112 during their first term of attendance at the University of Victoria in which it is offered if they do not already have credit for an equivalent course.

COMBINED COMPUTER SCIENCE/MATHEMATICS COOPERATIVE EDUCATION PROGRAM

Students are normally admitted to the Computer Science/Mathematics Cooperative Education Program in January after their first term on campus, and application for admission should be made before the end of the first term. However, in exceptional circumstances, students may be admitted to the program up to the end of their second year. In their third year, students may opt for a degree program in either Computer Science or Mathematics and will enter the Coop program in that department. Students who opt for a Combined degree in Computer Science and Mathematics or for a Double Major or Double Honours in Computer Science and Mathematics will remain in the Combined Computer Science/Mathematics Coop.

The requirements of the Computer Science Cooperative Education Program are described on page 191 of this calendar.

SCHOOL OF EARTH AND OCEAN SCIENCES

The School offers courses leading to a B.Sc., with General, Major, and Honours programs in Earth Sciences, and offers a selection of courses preparatory for those students with interest, or planning graduate studies, in oceanography.

The Earth Sciences programs require a core of earth science courses, co-requisite courses in the other sciences and a selection of electives suited to the interests of individual students. The Honours program requires undergraduates to undertake a research project including the writing of an Honours thesis. Students intending to pursue research or continue their studies for M.Sc. or Ph.D. degrees should consider the Honours program. The distinctive character of B.Sc. General Programs is the breadth of course options possible. Students in these programs may wish to combine a concentration in Earth Sciences with one in another science area (B.Sc.) or an arts area (B.A.). By taking a Minor program in Earth and Ocean Science along with a Major or Honours program in another discipline, students can prepare themselves for entry to graduate studies. Such interdisciplinary programs may be advantageous to students considering a postgraduate degree in environmental studies, oceanography, atmospheric sciences, or education. With approval of the Director of the School and the Assistant Dean of Arts and Science, some courses may be taken that are offered by the Royal Roads Military College.

EARTH SCIENCES PROGRAMS

B.Sc. Major or Honours		B.Sc. General	
First Year		**First Year**	
EOS 100/101	(3)	EOS 100/101	(3)
CHEM 101/102	(3)	CHEM 101/102	(3)
C SC 110 or 112	(1½)	C SC 110 or 112	(1½)
MATH 100/101	(3)	MATH 100/101	(3)
PHYS 110/120	(3)	PHYS 110/120	(3)
Elective	(1½)	Elective	(1½)
	15		15
Second Year		**Second Year**	
EOS 201/202	(3)	EOS 201/201	(3)
EOS 203/204	(3)	EOS 203/204	(3)
PHYS 210	(1½)	PHYS 210	(1½)
BIOL 150A/150B	(3)	BIOL 150A/150B	(3)
CHEM 222/245	(3)	CHEM 222/245	(3)
Elective	(1½)	Elective	(1½)
	15		15

Third Year		**Third Year**	
EOS300	(1½)	EOS 300	(1½)
EOS 350	(1½)	EOS 350	(1½)
EOS 360	(1½)	EOS 360	(1½)
EOS 370	(1½)	EOS 370	(1½)
BIOL 311A/311B	(3)	Electives	(9)
STAT 250/251 or BIOL 250/251	(3)		15
GEOG 322 or 323	(1½)		
Elective	(1½)		
	15		
Fourth Year		**Fourth Year**	
EOS 400	(1½)	EOS 410	(1½)
EOS 410	(1½)	EOS 460	(1½)
EOS 460	(1½)	Electives	(12)
EOS 490	(1½)		15
EOS 499 (Hons. only)	(3)		
GEOG 422 OR 428	(1½)		
Electives:			
Major	(7½)		
Honours	(4½)		
	15		
Total electives:		Total electives	24
Major	12		
Honours	9	Total units	60
Total units	60		

Honours in Earth Sciences

Students who wish to be admitted to one of the Honours programs should apply to the Director of the School on completion of their second year. The general requirements for admission to the third year of the Honours program are specified above. Normally admission to the Honours program requires at least a second class average in each of the first two undergraduate years. The minimum requirement for admission to the fourth year is a second class average overall in the work of the third year.

A student in the Earth Sciences Honours program is required to meet the general regulations of the University on pages 15 to 20 of this Calendar. If a student fails to meet the standards for the Honours degree, while meeting the Major degree requirements, the School may recommend the appropriate class of Major degree.

Field Courses

Earth Sciences 300 and 400 are usually scheduled outside of the normal term time at off-campus locations at dates specified by the School. Students may be required to meet part of the expenses involved and will be advised of such expenses during the first week of classes in the Fall Term.

EARTH AND OCEAN UNDERGRADUATE PROGRAMS

Students should consult the Director concerning courses offered in any particular year. The timetable also shows which courses are offered.

The names of faculty instructing courses, together with the required and recommended texts for each course, may be obtained from the School.

(Course offering codes: Y = September-April; F = September-December; S = January-April; K = May-August; NO = Not offered, this session.)

UNDERGRADUATE COURSES

EOS 100 and 101 are prerequsities to all other Earth and Ocean courses.

EOS 100 (formerly GEOL 100A) EARTH MATERIALS AND PROCESSES AT THE EARTH'S SURFACE
An introduction to the materials which make up the planet earth — focussing on minerals, rocks and fossils; how they occur — their sedimentary and tectonic structures, and the environments at the earth's surface where sediments and sedimentary rock are found. (3-0)

EOS 101 (formerly GEOL 100B) (1½) THE EARTH'S INTERNAL PROCESSES AND HISTORICAL GEOLOGY
An introduction to the earth's internal processes — volcanism, seismic activity, plate tectonics, metamorphism — and their relationships to the nature and distribution of earth materials. The history of the earth, the rock record, the geological time scale and the geology of North America will be discussed. (*Prerequisite:* 100) (3-2)

EOS 201 (formerly GEOL 201) (1½)STRATIGRAPHY
An investigation of some aspects of the geology of sedimentary rocks. The topics discussed include: physical and chemical properties of sediments; sediment transport and accumulation; stratification; structures; practical applications of stratigraphy; and an overview of the stratigraphy of Western Canada. (2-2)

EOS 202 (formerly GEOL 202) (1½) STRUCTURAL GEOLOGY
The basic concepts of structural geology are introduced. The topics examined include: the physical controls, the analysis, the detection, and the geometric display of geologic structures. (2-3)

EOS 203 (formerly GEOL 203) (1½) INTRODUCTION TO MINERALOGY
A study of the fundamental characteristics of minerals including physical, chemical, crystal and optical properties. The occurrence and classification of rock forming and economic mineral suites will be discussed. (*Prerequisites:* 3 units of 100 level Physics and 3 units of 100 level Chemistry, or permission) (2-3)

EOS 204 (formerly GEOL 204) (1½) INTRODUCTION TO PETROLOGY
An examination of the origin, occurrence, structure and history of rocks. Particular emphasis will be placed on igneous and metamorphic rock types. Sedimentary and other rocks such as veins, meteorites, and residual and groundwater affected materials will also be examined. (*Prereguisite:* 203 or equivalent) (2-3)

EOS 300 (formerly GEOL 310) (1½) EARTH SCIENCE FIELD SCHOOL
A two-week field course in Western Canada, during which the students will be introduced to: geological mapping (including traversing, sampling, prospecting and acquisition of geological data), the major geologic and tectonic provinces, and the use of geophysical equipment. Normally held in late April - early May after examinations for Year 2. (*Prerequisites:* 3 units from 201, 202, 203, 204)

EOS 350 (formerly GEOL 350) (1½) RESOURCE GEOLOGY
A geological study of the major types of economically important metallic and nonmetallic minerals and fossil fuels, basic processes of ore formation, exploration and mining techniques. The impacts of these activities on the environment are also considered. (*Prerequisites:* 203 and 204, or permission) (3-3)

EOS 360 (1½) GEOCHEMISTRY
An introduction to the application of chemical principles to the study of earth systems, focussing primarily on processes at or near the earth's surface. Includes discussion of the origin, fluxes and distribution of elements and their isotopes. (*Prerequisites:* 100 and 101; CHEM 222 and 245) (3-0)

EOS 370 (formerly GEOL 370) (1½) SEDIMENTOLOGY
A study of the depositional environments of sediments, lithification and diagenesis, textural characteristics, occurrence and preservation of sendimentary rocks. Emphasis will be placed on examples from the geological record. (*Prerequisites:* 201 and 204, or permission) (3-3)

EOS 400 (1½) ADVANCED FIELD SCHOOL
A two-week field trip through the Southern Canadian Cordillera, examining the rock units and structures of the major tectonic elements in southern British Columbia and Alberta. Parallels, where possible, recent COCORP and LITHOPROBE seismic survey routes. Introduces the complex evolutionary states of the western margin of North America. Normally held in late August - early September, prior to registration. (*Prerequisite:* 300)

EOS 410 (formerly GEOL 410) (1½) GLOBAL TECTONICS

A study of global tectonic systems including geological, geophysical, geochemical and geographical perspectives on major tectonic environments. A wide range of examples from different continents will be used. Vancouver Island will also be examined. (*Prerequisite:* 202, or permission) (3-0)

EOS 460 (1½) EARTH SYSTEM SCIENCE

An examination of the interrelationships between the complex systems operating in the solid earth, hydrosphere and atmosphere; methods of systems analysis for the planet; modeling of global processes, especially past and future climate change. (*Prerequisites:* completion of at least three 300-level EOS courses) (3-0)

EOS 490 (formerly GEO 490) (1½ or 3) DIRECTED STUDIES IN GEOLOGY

With the consent of the School and the faculty member concerned, a student may be permitted to pursue a course of directed studies. No student is permitted to take more than three units of 490 studies. In order to qualify for a 490 course, a student must have at least a 6. 00 G.P.A. in the previous 15 units of University work.

EOS 499 (3) HONOUR THESIS

A research project conducted under the direction of faculty. This course is normally restricted to Earth and Ocean Honours students.

(Grading: INP; letter grade)

DEPARTMENT OF ECONOMICS

John A. Schofield, B.A. (Durh.), M.B.A. (Indiana), M.A., Ph.D. (S. Fraser), Professor and Chair of the Department
J. Colin H. Jones, B.A. (Wales), M.A. (Mon. St.), Ph.D. (Queen's), Professor
Leonard Laudadio, B.A. (Puget Sound), M.A., Ph.D. (Wash.), Professor
Carl A. Mosk, A.B. (Calif.-Berk.), M.S. (M.I.T.), Ph.D. (Harv.), Professor of Economic Relations with Japan
William D. Walsh, B.Com. (Brit. Col.), M.A., Ph.D. (Yale), Professor
Gerald R. Walter, B.A., M.A., Ph.D. (Calif.), Professor
Kenneth L. Avio, B.Sc. (Ore.), M.S., Ph.D. (Purdue), Associate Professor
Robert V. Cherneff, B.A. (U. of Vic.), M.A., Ph.D. (Wash), Associate Professor
David B. Nickerson, B.A. (U. of Missouri), M.A., Ph.D. (North W.), Associate Professor
Malcolm Rutherford, B.A. (Heriot-Watt), M.A. (S. Fraser), Ph.D. (Durh.), Associate Professor
Joseph Schaafsma, B.A., M.A. (McM.), Ph.D. (Tor.), Associate Professor
Ian P. King, B.A. (Conc.), M.A., Ph.D. (Queen's), Assistant Professor
Donald G. Ferguson, B.A., M.A., Ph.D. (Tor.), Assistant Professor
Serge Nadeau, B.A., M.B.A. (Laval), Ph.D. (Carnegie - Mellon), Assistant Professor
Nancy M. South, B.A. (Brit. Col.), M.A. (Essex), Ph.D. (Tor.), Assistant Professor
Kenneth G. Stewart, B.A. (Dal.), M.Sc. (Lond.), M.A., M.A., Ph.D. (Mich.), Assistant Professor
Linda A. Welling, B.A. (Mt. All.), M.A. (Queen's), Ph.D. (W. Ont.), Assistant Professor
Anming Zhang, B.Sc. (Shanghai Jiao Tong), M.Sc. (Brit.Col.), Ph.D. (Brit.Col.), Assistant Professor

Visiting, Adjunct and Cross-listed Appointments:

Clarence L. Barber, B.A. (Sask.), M.A. (Clark), Ph.D. (Minn.), Adjunct Professor (1990-92)
Robert L. Bish, A.B. (S. Calif.), A.M., Ph.D. (Indiana), Professor (Public Administration) (1990-92)
Thomas N. Brewis, B.Comm., M.Comm., Ph.D. (Durh.), Adjunct Professor (1990-92)
James Cutt, M.A. (Edin.), M.A., Ph.D. (Tor.), Professor (Public Administration) (1990-92)
A. Rodney Dobell, B.A., M.A. (Brit. Col.), Ph.D. (M.I.T.), Adjunct Professor (1990-92)
Ralph W. Huenemann, B.A. (Oberlin), M.A., Ph.D. (Harv.), Professor of Economic Relations with China (Public Administration) (1990-92)
James J. McRae, B.A. (U. of Vic.), M.A., Ph.D. (W. Ont.), Professor (Public Administration) (1990-92)
Sajjad Akbar, B.A., M.A. (Karachi), M.A. (Wat.), Ph.D. (S. Fraser), Visiting Assistant Professor (1990-91)
Michele Pujol, M.A. (Wash.) , Ph.D. (S. Fraser), Assistant Professor (Women's Studies) (1990-92)
Roderick Hay, B.A. (Wat.), M.A. (Tor.), Visiting Lecturer (1990-91)
Richard J. Porges, B.A., M.A. (S. Fraser), Visiting Lecturer (1990-91)

GRADUATE PROGRAM

For further information on studies leading to the M.A. Degree, see page 250.

LIMITATION OF ENROLLMENT

Students are advised that because of limited staff and facilities, it may be necessary to limit enrollment in certain courses. Course enrollment limits will be listed during registration. Students will be admitted on a first come, first served basis.

GENERAL, MAJOR AND HONOURS B.A. PROGRAMS

Requirements:
General

(a) 201 and 202
(b) 9 units of Economics courses numbered 300 and above

Major

(a) A grade point average of at least 3.00 in 201 and 202 and not less than a C in either course
(b) Math 100 and 101 or 151 and 102, or 151 and 100, or permission of the Department (See Note 2)
(c) At least a C+ in 240 (See Note 3)
(d) A total of 15 units of Economics courses numbered 300 and above, including:
One of 300 or 302
One of 301 or 303
321
340 (See Note 3)

Honours

(a) A grade point average of at least 5.50 in 201 and 202, and not less than a B in either course
(b) Mathematics requirement as for Major
(c) At least a B in 240 (See Note 3)
(d) 300 and 301 with a grade point average of at least 5.50 and not less than a B- in any one of these courses
(e) At least a B- in 340 (See Note 3)
(f) 321 and 470
(g) In addition to the 12 upper level units specified in (d), (e), and (f), 12 additional units of Economics courses numbered above 300
(h) Three upper level units in another subject or subjects chosen with the approval of the Department. The Department may permit lower level Computer Science or Mathematics courses as substitutes for all or part of these three units
(i) Three units of electives, any level

Suggested electives for all students in the B.A. in Economics program; COM 202, 210 and 220; CSC 200; 3 units of Mathematics in addition to 100 and 101 or 151 and 102; POLI 100.

MAJOR AND HONOURS B.Sc. PROGRAMS

Major

(a) A grade point average of at least 3.00 in 201 and 202 and not less than a C in either course
(b) MATH 151 and 102 (or 100); and 240. Or, MATH 100 and 101; and 233A; and 200 and 201. Or, permission of the Department. (See Note 2)
(c) At least a C+ in 240 (See Note 3)
(d) At least a C+ in 350
(e) CSC 110 or 112
(f) A total of at least 15 units of Economics courses numbered 300 and above, including:
One of 300 or 302
One of 301 or 303
350, 440, 445 and one of 450 or 455
340 (See Note 3)

Honours

(a) A grade point average of at least 5.50 in 201 and 202, and not less than a B in either course
(b) Mathematics requirements as for Major
(c) CSC 110 or 112
(d) At least a B in 240 (See Note 3)
(e) 300 and 301 with a grade point average of at least 5.50 and not less than a B- in any one of these courses
(f) At least a B- in 340 (See Note 3)
(g) 350, one of 450 or 455, 440, 445 and 470
(h) At least a C+ in 350
(i) In addition to the 19½ upper level units specified in (e), (f), and (g), 6 additional units of Economics courses numbered 300 and above
(j) Three upper level units in another subject or subjects chosen with the approval of the Department. The Department may permit lower level Computer Science or Mathematics courses as substitutes for all or part of these three units
(k) One and a half units of electives, any level

Suggested electives for students in the B.Sc. in Economics program are: MATH 233A and 242, CSC 115, 230 and 275, COM 202 and 210, PHIL 222A and 222B.

NOTES

1. No more than six (6) units of Economics courses numbered 300 and above which are taken prior to the attainment of the G.P.A. in 201/202 required for a Major or Honours program may be counted for the respective program.
2. Mathematics:
   (a) Mathematics requirements for Major and Honours programs should normally be completed by the end of the Second Year.
   (b) In order to satisfy the prerequisites of required courses in the B.Sc. program, MATH 240 must be completed in the Second Year.
3. Statistics:
   (a) 240 should normally be completed by the end of the Second Year and must be completed by the end of the Third Year.
   (b) 340 should normally be completed by the end of the Third Year.
   (c) STAT 250 may be substituted for 240, provided the grade requirements specified for 240 are also satisfied in STAT 250.
   (d) STAT 251 may be substituted for 340 provided the grade requirements specified for 340 are also satisfied in STAT 251.
   (e) Students who substitute STAT 251 for 340 are required to take an alternative 1½ units of upper level Economics in order to replace 340 in meeting upper level Economics program requirements.
4. In the Honours B.Sc. program, a maximum of 6 units of upper level courses in Mathematics, Computer Science or Statistics may be substituted for upper level Economics courses with permission of the Department.
5. Students wishing to proceed to graduate studies in Economics are advised to include 350, 440, 445 and MATH 240 in their undergraduate program.

ADDITIONAL INFORMATION

1. Admission to an Honours program, which should be sought at the end of the Second Year, requires permission of the Department. Interested students should consult the Honours Adviser or the Department as early as possible in the first two years. Honours students will be required to maintain at least a second class average in courses taken within the Department in the Third and Fourth Years. ECON 470 is required for all Fourth Year Honours students. Third Year Honours students may be required to attend the seminar.
2. To obtain a First Class Honours degree the requirements will be: a graduating average of at least 6.50; a grade point average of at least 6.50 computed on the basis of all upper level courses taken within the Department, except 470; and at least a second class grade in 470.
3. To obtain a Second Class Honours degree, the requirements will be a graduating average of at least 3.50; a grade point average of at least 3.50 computed on the basis of all upper level courses taken within the Department, except 470; and at least a C in 470.
4. A student who fails to meet Departmental requirements for a first class standing in an Honours program but has a first class graduating average will be offered the choice between Second Class Honours and a First Class Major degree. A student who fails to meet Departmental requirements for second class standing in an Honours program but has a second class graduating average will be granted a Second Class Major degree.
5. Double Major: Students seeking a double major with another discipline in which a B.Sc. designation is offered may receive a B.Sc. only if the Economics B.Sc. requirements have been satisfied.

UNDERGRADUATE COURSES

ECONOMICS INTRODUCTORY AND INDIVIDUAL COURSES

Students who wish to take only one course in Economics should consider 100. Upper level courses may also be taken subject to the following regulations governing the prerequisite courses.

201 and 202 are prerequisites for all Third Year courses, unless otherwise stated below. In special cases, 201 and 202 may be taken concurrently with Economics courses numbered 305 and above with the permission of the Department. One of 300 or 302 and one of 301 or 303 are prerequisites for all courses numbered 400 and above unless permission is granted by the Department or unless otherwise stated below. 300 and 301 are only open to students with at least a 3.00 G.P.A. in 201 and 202 with not less than a C in either course.

Students should consult the Department concerning courses offered in a particular year.

(Course offering codes: Y = Sept.-Apr., F = Sept.-Dec., S = Jan.-Apr., K = May-Aug., NO = Not offered, this session)

ECON 100 (1½, formerly 3) THE CANADIAN ECONOMY — PROBLEMS AND POLICIES

A discussion of some of the important issues in economic decision making in both private and public sectors of the Canadian economy with an introduction to the basic concepts of economic analysis. (NOTE: Students wishing to proceed into the Commerce program at the University of British Columbia are advised to take 201 and 202 in their first year.) (*Prerequisite:* None; credit cannot be obtained by those who have previous credit in Economics; 100 and 201/202 cannot be taken concurrently.) F(3-0)

ECON 201 (1½) PRINCIPLES OF MICROECONOMICS

The principles of microeconomic analysis with special reference to the theory of demand, the theory of the firm and the theory of distribution. (Not open to students with credit in 280 or ENGR 280) (*Prerequisite:* Algebra 12 or Math 012 or permission of the Department; 100 and 201 cannot be taken concurrently.) FS(3-1)

ECON 202 (1½) PRINCIPLES OF MACROECONOMICS

The principles of macroeconomic analysis with special reference to fluctuations in income and prices, monetary and fiscal policies for economic stabilization. (*Prerequisite:* Algebra 12 or Math 012 or permission of the Department; 100 and 202 cannot be taken concurrently.) FS(3-1)

ECON 240 (1½) DESCRIPTIVE STATISTICS AND PROBABILITY
Populations, samples, measures of central location and dispersion. Deterministic time series analysis: trends, moving averages, seasonal adjustment, index numbers. Probability laws. Discrete and continuous random variables. Joint, marginal, and conditional distributions. Mathematical expectation and variance. Functions of random variables; laws of expectation. Covariance and correlation. Binomial, Poisson, and normal distributions. (*Prerequisite:* 100, or *corequisite:* 201 or 202. *Prerequisites:* Math 151 and 102, or 151 and 100, or 100 and 101, or permission of the Department) (See Credit Limit, page 15) FS(3-1)

NOTE: The following two courses (300, 301) are open only to students with at least a 3.00 G.P.A. in 201 and 202, with not less than a C in either course.

ECON 300 (3) MICROECONOMICS
Theories of demand and production; pricing of factors of production; general equilibrium theory; welfare economics; some applications of price theory. (*Prerequisite:* MATH 102 or 100) (Not open to students with credit in 302 or 304A. Also see Note above)
L. Laudadio Y(3-0)

ECON 301 (3) MACROECONOMIC THEORY
Theories of income and employment with special reference to the classical and the Keynesian models; the dynamics of aggregate supply and demand; theory of inflation; economic growth. (*Pre- or corequisite:* MATH 102 or 100) (Not open to students with credit in 303 or 304B. Also see Note above)
R.V. Cherneff Y(3-0)

ECON 302 (1½) INTERMEDIATE MICROECONOMIC THEORY
An examination of the theories of consumer demand; production and cost; the firm and market under conditions of perfect competition, monopoly, monopolistic competition and oligopoly; factor markets and distribution; and welfare economics. (*Pre- or corequisite:* MATH 102 or 100) (Not open to students with credit in 300 or 304A. Also see Note above) FS(3-0)

ECON 303 (1½) INTERMEDIATE MACROECONOMIC THEORY
Theories of aggregate economic behaviour; the determination of national income and employment, consumption, investment, inflation, growth and fluctuations, economic policy. (*Pre- or corequisite:* MATH 102 or 100) (Not open to students with credit in 301 or 304B. Also see Note above) FS(3-0)

ECON 305 (1½) INTRODUCTION TO MONEY AND BANKING
The principles of money, credit creation and banking; organization, operation and control of the banking system; and the relationship between the quantity of money and the level of economic activity.
R.V. Cherneff FS(3-0)

ECON 307 (formerly 402) (1½) HISTORY OF ECONOMIC THOUGHT
A survey of the ideas of major thinkers in Economics from the Mercantilist and Physiocratic Schools, through Adam Smith and Classical Economics, to the development of Neoclassicism and the Macroeconomics of J.M. Keynes. (Not open to students with credit in 407)
M. Rutherford F(3-0)

ECON 308 (1½) AN INTRODUCTION TO THE ECONOMIC ANALYSIS OF LAW
Application of economic principles and methodology to the law of property, torts and contracts, as well as to criminal, family and corporate law. (Not open to students with credit in 408)
K.L. Avio S(3-0)

ECON 310 (3) INDUSTRIAL ORGANIZATION AND PUBLIC POLICY
Problems of competition and monopoly; relevant public policy, with special reference to Canada.
J.C.H. Jones Y(3-0)

ECON 312 (formerly 412) (1½) URBAN LAND ECONOMICS
Application of economic principles to the form and structure of urban areas; land use, external effects and public policy in the urban context. Topics include: intraurban location, economic function and specialization within the city, the economics of urban transport, housing and public services.
G.R. Walter F(3-0)

ECON 315 (3) LABOUR ECONOMICS AND INSTITUTIONS
The economic analysis of labour markets; labour demand and supply; human capital theory; wage and employment determination; the economics of discrimination; government intervention in the labour market; selected macroeconomic aspects of labour markets. Topics in labour market institutions selected from: the theory of labour movements; the structure of organized labour in Canada; the economics of trade unions; collective bargaining models; industrial disputes; dispute settlement procedures.
W.D. Walsh Y(3-0)

ECON 317 (1½) THE ECONOMICS OF CANADIAN HEALTH CARE
An analysis of resource allocation in the Canadian health care sector. Topics include the special characteristics of health care goods and services, market failures in the health care sector, economic modelling of the consumption and production of health care, and a discussion of current issues in the economics of health care. (*Prerequisite:* 201)
J. Schaafsma S(3-0)

ECON 320 (1½) ECONOMIC DEVELOPMENT
An examination of the economics of development with reference to Third World countries. Main emphasis will be on problems and policies, both domestic and international. Topics will include the relevance of the historical growth experience; poverty and income distribution; agriculture, technology, industrialization, and education; population and migration; international trade and foreign investment. F(3-0)

ECON 321 (1½) THE ECONOMIC HISTORY OF CANADA
The story of long-run economic growth and welfare in the Canadian economy, with the aid of economic analysis, quantitative data and other historical materials. Emphasis on the development of the Canadian economy from a resource based economy to a developed industrial economy within an international setting.
N.M. South FS(3-0)

ECON 322 (PACI 322) (1½) ECONOMIC DEVELOPMENT OF JAPAN
A course in the economic development of Japan principally concentrating on the 20th century. The first half of the course deals with the Tokugawa economy, the transition into the Meiji period and the interwar economy. The second half deals with the postwar period, especially with the era of high speed growth, although there is also discussion of developments after the oil crisis of 1973-74. Topics include savings and investment, trade, importing and adapting foreign technology, government policies and labour. (*Prerequisites*: 100, or 201, or permission of the Economics Department; PACI 200 or permission of the Economics Department)
C.A. Mosk F(3-0)

ECON 323A (formerly half of 323) (1½) COMPARATIVE ECONOMIC SYSTEMS
A study of modern economic systems with reference to Capitalist, Socialist, and Third World economies; emphasis will be given to the organization, operation, and performance of economic systems.
D.G. Ferguson S(3-0)

ECON 323B (formerly half of 323) (1½) THE SOCIALIST ECONOMIES
A study of the history, institutions, principles of operation, performance and prospects of the Soviet and other east European economies.
D.G. Ferguson NO(3-0)

ECON 324 (PACI 324) (1½) ECONOMIC DEVELOPMENT IN SOUTHEAST ASIA
Economic performance and economic institutions of countries in Southeast Asia with special reference to Indonesia, Malaysia, the Philippines, and Thailand; focus will be mainly on current issues and on international economic relations of the region with the rest of Asia and with North America. (*Prerequisite:* 100, or 201, or permission of the Economics Department; PACI 200 or permission of the Economics Department)
F(3-0)

ECON 325 (1½) PUBLIC FINANCE

A discussion of taxation and expenditure policies with an emphasis on Canada. Microeconomic effects of these policies will be examined in detail.
J. Schaafsma F(3-0)

ECON 326 (1½) FISCAL POLICY AND RELATED ISSUES

A discussion of the principles of fiscal policy in the context of macroeconomic theory. This course will also examine the recent historical record of Canadian fiscal policy and focus on policy options for the present and future.
J. Schaafsma S(3-0)

ECON 330 (ES 312) (1½) ENVIRONMENTAL ECONOMICS

Economic principles as applied to environmental questions associated with B.C. resource exploitation. The problem of spillovers to economic processes. Externalities and their management through economic institutions. Economic aspects of the use and conservation of the environment, particularly regarding energy, forestry, fisheries, mining, air and water. Problem of sustainable production, conservation, and possible limits to economic growth arising from scarcity of environmental resources. (*Prerequisite:* 201 or permission of the Department) (Not open to students with credit in 430, 430A or 430B)
L. Laudadio FS(3-0)

ECON 340 (1½) STATISTICAL INFERENCE

Estimation, confidence intervals and hypotheses tests. Simple regression and correlation. Multiple regression; t and F tests. (Not open to students who have credit for STAT 251) (*Prerequisites:* 240 or STAT 250; MATH 100 and 101, or 151 and 102, or 151 and 100, or permission of the Department) (See Credit Limit, page 15)
S. Nadeau FS(3-1)

ECON 345 (1½) APPLIED ECONOMETRICS

An intuitive development of the basic concepts and techniques in econometrics. The emphasis is on the application of econometric concepts and techniques in analyzing economic phenomena. (*Prerequisite:* 340 or equivalent) (Cannot be taken concurrently with 445) (Not open to students with credit for 445)
J. Schaafsma S(3-0)

ECON 350 (1½) AN INTRODUCTION TO MATHEMATICAL ECONOMICS

An introduction to the application of calculus and linear algebra to selected problems in microeconomic and macroeconomic theory. (*Prerequisite:* MATH 240 or permission of the Department. *Pre- or corequisite:* 300 or 302, and 301 or 303)
K.L. Avio S(3-1)

ECON 405A (formerly half of 405) (1½) INTERNATIONAL TRADE THEORY AND POLICY

A study of international trade theory and its applications; topics include: The determinants of patterns of trade and investment; trade, growth and welfare; the political economy of tariffs; the regional impact of tariffs. The approach is both theoretical and empirical. F(3-0)

ECON 405B (formerly half of 405) (1½) INTERNATIONAL MONETARY THEORY AND POLICY

A study of international monetary economics, including such topics as foreign exchange markets, Keynesian and monetarist mechanisms of adjustment, forward exchange markets, alternate exchange rate systems, capital mobility and open economy macro policies.
R.V. Cherneff S(3-0)

ECON 406 (1½) MONETARY THEORY AND POLICY

The nature of a monetary economy; money supply models; money demand models and empirical evidence; neo-Keynesian and Monetarist theories contrasted; the instruments, indicators, and objectives of monetary policy; recent Canadian monetary policy. Some familiarity with partial differentiation is required. (*Prerequisite:* 303 or 301 or 304B, or permission of the Department; 305 recommended) NO(3-0)

ECON 407 (1½) TOPICS IN THE HISTORY OF ECONOMIC THOUGHT

Seminar in selected issues in the History of Economic Thought. Topics will include a detailed examination of Adam Smith's *Wealth of Nations* and Alfred Marshall's *Principles of Economics*. Other topics may vary from year to year.
M. Rutherford S(3-0)

ECON 408 (3; formerly 1½) ECONOMIC ANALYSIS OF LAW

An intensive investigation of economic aspects of law and legal institutions. Applications will include economic reasoning applied to the law of property, tort, contract and crime. (*Prerequisite:* 300 or 302; *corequisite:* 340 or equivalent) (Not normally open to students with credit in 308)
K.L. Avio Y(3-0)

ECON 410A (formerly half of 410) (1½) PROBLEMS OF CANADIAN MICROECONOMIC POLICY

Selected topics involving the application of microeconomic analysis to Canadian problems and policies; topics vary but generally include education, health care, regulation and competition policy. (*Prerequisite:* 300 or 302 or 304A)
J.C.H. Jones F(3-0)

ECON 410B (formerly half of 410) (1½) PROBLEMS OF CANADIAN MACROECONOMIC POLICY

Selected topics involving the application of macroeconomic analysis to Canadian problems and policies in the areas of unemployment, inflation and economic growth. (*Prerequisite:* 301 or 303 or 304B)
L. Laudadio S(3-0)

ECON 414 (1½) REGIONAL ECONOMICS

Consideration of the problem of regional economic disparities. Theories of migration, location and regional economic growth. Techniques for analyzing aspects of the regional problem, including cost benefit analysis, regional accounting, shift share analysis, multiplier analysis. Policy issues relating to the problem.
J. Schofield NO(3-0)

ECON 416 (1½) COST BENEFIT ANALYSIS: PRINCIPLES AND APPLICATION

Principles of cost benefit analysis including consideration of welfare economics, the treatment of intangibles, nonefficiency considerations, time discounting, evaluation criteria, uncertainty and risk; selected applications in such areas as human resource economics, natural resource and recreation economics, economic development and urban planning. (*Pre-requisite*: 300 or 302)
J. Schofield S(3-0)

ECON 420 (1½) THEORY OF ECONOMIC DEVELOPMENT

Theories of economic development; domestic policies for development; investment criteria; planning and financing economic development; the role of foreign trade and aid in economic development. S(3-0)

ECON 421 (1½) EUROPEAN AND INTERNATIONAL ECONOMIC HISTORY

The rise of capitalism and the Industrial Revolution especially in Western Europe. The British experience and comparative rates of growth in European countries, with some attention to the transference of industrialization techniques to non-European countries.
N.M. South S(3-0)

ECON 427 (1½) PUBLIC CHOICE THEORY

The use of concepts from economic theory to analyze the structure and performance of the public sector. Topics include the nature of public and packageable goods, demand articulation, political organization, bureaucratic supply and public service industry structure. (*Prerequisite:* 300 or 302 or 304A, or permission of the Department)
R.L. Bish F(3-0)

ECON 429 (1½) POPULATION ECONOMICS

This course commences with a discussion of basic demographic methods and then takes up topics in population analysis of interest to economists. Topics to be covered include: Malthusian theory; the eco-

nomic consequences of population growth; the economics of fertility, mortality and migration; aging and intergenerational transfers. Applications to development, labour, public finance, and other fields of economics may be included. (*Prerequisite:* 301 or 303)
C.A. Mosk S(3-0)

ECON 430A (1½) NATURAL RESOURCE ECONOMICS
An examination of the economic principles governing the use of natural resources, social and private cost and the regulation of natural resource use. The economics of various resource sectors, including fisheries, forests, recreation and mining. (*Prerequiste*: 300 or 302 or 304A, or permission of the Department)
G.R. Walter F(3-0)

ECON 430B (1½) TOPICS IN NATURAL RESOURCE ECONOMICS
Seminar on selected issues in natural resource economics; rents and their appropriation, taxation, user's cost, ecology and economics, depletion of energy and other reserves, transportation economics and resource exploitation, and applications of cost benefit analysis are indicative topics. (*Prerequisites*: 330 or 430A, or permission of the Department)
G.R. Walter S(3-0)

ECON 435 (1½) FINANCIAL ECONOMICS
An introduction to the application of economics to finance, with an emphasis on the theory of asset pricing. Topics include mean-variance portfolio analysis; the capital asset pricing model and arbitrage pricing theory; equity and fixed income securities; options and the Black-Scholes pricing formula; and futures contracts. (*Prerequisites*: 300 or 302, and 340 or equivalent)
K.G. Stewart S(3-0)

ECON 440 (3) ADVANCED ECONOMIC THEORY: A MATHEMATICAL APPROACH
Selected topics in advanced economic theory including general equilibrium theory, welfare economics, theories of capital and interest, the theory of economic growth. Extensive use of mathematics. (*Prerequisite:* 350, or 304A and 304B)
D.G. Ferguson Y(3-0)

ECON 445 (3) ECONOMETRICS
The application of statistics to economics. Properties of estimators, methods of estimation. Simple and multiple regression. Violations of assumptions: heteroscedasticity, autocorrelation, stochastic regressors. Specification error, dummy variables, linear and nonlinear restrictions, distributed lags. Simultaneous equations: identification and estimation. The emphasis is on the principles of econometric theory, although some assignments will involve economic applications and data analysis. (*Prerequisites*: 340 or equivalent, and either MATH 240 or MATH 100, 101 and 233A)
K.G. Stewart Y(3-0)

ECON 450 (1½) THEORY OF INDUSTRIAL ORGANIZATION
Application of game theory to the study of the strategic interaction between firms, emphasizing both standard issues and recent developments in the field. Possible topics include: sequential games and games with incomplete information, strategic output and price determination, technological rivalry, entry deterrence and predation. (*Prerequisite:* 350)
A. Zhang F(3-0)

ECON 455 (1½) AN INTRODUCTION TO ECONOMIC DYNAMICS
Application of dynamic methods to economics, emphasizing both traditional issues and recent developments in the field. Possible topics include: intertemporal optimization, the theory of growth and endogenous technological change, dynamic macroeconomic models (*Prerequisite:* 350)
A. Zhang S(3-0)

ECON 470 (3) HONOURS SEMINAR
(NOTE: For Honours Students only)
K.L. Avio Y

ECON 495 (1½ or 3) DIRECTED STUDIES
Directed reading and/or research for major and honours students with first class standing in Economics under the supervision of a faculty member willing to supervise such a course. Students may take this course for a total of up to three units. (*Prerequisite:* Permission of the Department)

DEPARTMENT OF ENGLISH

Terry G. Sherwood, B.A. (Ore.), M.A., Ph.D. (Calif., Berk.), Professor and Chair of the Department
William Benzie, M.A., M.Ed., Ph.D. (Aberd.), Professor
Edward I. Berry, A.B. (Wesleyan), M.A., Ph.D. (Calif., Berk.), Professor
Michael R. Best, B.A., Ph.D. (Adel.), Professor
Charles Doyle, B.A., M.A. (N.Z.), Ph.D. (Auckl.), Professor
Anthony S.G. Edwards, B.A. (R'dg), M.A. (McM.), Ph.D. (London), Professor
Anthony B. England, B.A., M.A. (Manc.), Ph.D. (Yale), Professor
Mel D. Faber, B.A. (Chic.), M.A., Ph.D. (Calif., L.A.), Professor
Bryan N.S. Gooch, B.A., M.A. (Brit. Col.), Ph.D. (Lond.), A.R.C.T. (Tor.), L.T.C.L., F.T.C.L. (Lond.), Professor
Patrick J. Grant, B.A. (Queen's, Belf.), D.Phil. (Suss.), Professor
Anthony W. Jenkins, M.A. (Cantab.), Ph.D. (Calif., Berk.), Professor
Victor A. Neufeldt, B.A. (Brit. Col.), Ph.D. (Ill.), Professor
Colin J. Partridge, B.A. (Nott.), Cert.Ed. (Lond.), Ph.D. (Nott.), Professor
Stephen A.C. Scobie, M.A. (St. And.), Ph.D. (Brit. Col.), Professor
Herbert F. Smith, A.B., A.M. (Bost.), Ph.D. (Rutgers), Professor
Henry E. Summerfield, B.A., M.A. (Oxon.), M.Litt. (Durh.), Professor
Reginald C. Terry, B.A. (Leic.), M.A. (Brist.), Ph.D. (Lond.), Professor
David S. Thatcher, B.A. (Cantab.), M.A. (McM.), Ph.D. (Alta.), Professor
G. Kim Blank, B.A. (S. Fraser), M.A. (Wales), Ph.D. (Southampton), Associate Professor
Thomas R. Cleary, B.A. (Queens Coll.), M.A., Ph.D. (Prin.), Associate Professor
Evelyn M. Cobley, B.A. (B.Y.U.), M.A., Ph.D. (Brit. Col.), Associate Professor
Diane Edwards, B.A. (Roch.), M.A., Ph.D. (Prin.), Associate Professor and Director, First Year English and Language Programs
John G. Hayman, B.A., M.A. (Oxon.), M.A. (Corn.), Ph.D. (Northw.), Associate Professor
Carol V. Johnson, B.A. (Coll. of St. Cath.), M.A. (Marquette), M.F.A. (Iowa), Ph.D. (Brist.), Associate Professor
Arnold Keller, B.A. (George Williams), M.A. (Claremont), M.A., Ph.D. (Con.), Assciate Professor and Director, Writing Program
Patricia J. Koster, B.A. (Brit. Col.), M.A. (Calif., Berk.), Ph.D. (Lond.), Associate Professor
Robert M. Schuler, B.A. (Bellarmine), M.A., Ph.D. (Colo.), Associate Professor
Nelson C. Smith, B.A. (Prin.), M.A.T. (Oberlin), Ph.D. (Wash.), Associate Professor
John J. Tucker, B.A., M.A. (Tor.), B.Lit. (Oxon.), Ph.D. (Tor.), Associate Professor
Bruce E. Wallis, B.A. (Rutgers), M.A. (Harv.), Ph.D. (Prin.), Associate Professor
Trevor L. Williams, B.A., M.A. (Manc.), Ph.D. (Wales), Associate Professor
Edward R. Zietlow, B.A. (Dakota Wesleyan), M.A. (Bost.), Ph.D. (Wash.), Associate Professor
Elizabeth F. Archibald, B.A., M.A. (Cantab.), M.Phil., Ph.D. (Yale), Assistant Professor
Misao Anne Dean, B.A., M.A. (Car.), Ph.D. (Queen's), Assistant Professor
George H. Forbes, B.A. (Brit. Col.), M.A., Phil.M. (Tor.), Assistant Professor
Gordon D. Fulton, B.A. (Tor.), M.A., Ph.D. (Lond.), Assistant Professor
Smaro Kamboureli, B.A. (Aristotelian), M.A., Ph.D. (Man.), Assistant Professor
Kathryn Kerby-Fulton, B.A., B.Ed. (York, Can.), D.Phil. (York, U.K.), Assistant Professor

Margot K. Louis, B.A. (Smith Coll.), B.A. (Oxon.), Ph.D. (Tor.), Assistant Professor
Judith I. Mitchell, B.A., M.A., (Sask.), Ph.D. (Alta.), Assistant Professor
Toby Myrthen, B.A., M.A. (Acadia), Ph.D. (Dal.), Assistant Professor
Hedy Miller, B.A., M.A., M.L.S. (Brit. Col.), Administrative Officer

Visiting and Adjunct Appointments:

Beryl Rowland, Ph.D. (Brit. Col.), D.Litt. (Mt. St. Vin.), Adjunct Professor (1989-91)
Gerald V. Baillargeon, B.A., M.A. (Windsor), Ph.D. (Brit. Col.), Visiting Assistant Professor (1990-91)
J. Douglas Beardsley, B.A. (U. of Vic.), M.A. (York), Visiting Lecturer (1989-91)
James A. Dopp, B.A. (W. Laurier), M.A. (U. of Vic.), Visiting Lecturer (1990-91)
Clair McKenzie, B.A., M.A. (U. of Vic.), Visiting Lecturer (1991)
K. Dawn Neill, B.A. (Trent), M.A. (U. of Vic.), Visiting Lecturer (1989-91)

GRADUATE PROGRAMS

For information on studies leading to the M.A. and Ph.D. degrees, see page 263.

GENERAL, MAJOR AND HONOURS PROGRAMS

Prerequisites

Students are referred to the University's regulations concerning the English Requirement on page 13, and to the remarks about First Year English on the same page. (Also see Registration, page 12.)

The prerequisite for all English courses numbered 200 and above is 3 units of first year English. This prerequisite may be satisfied by two courses taken from 115, 116, 121, 122; or by three units of appropriate transfer credit in English. However, with permission of the Department, some students may take 200 level courses in their first year. Second year students may take courses numbered 300 and above, but will be required to meet the normal standards of senior courses.

Every student is required to own a good dictionary, e.g., *The Concise Oxford Dictionary, The American College Dictionary, Webster's Collegiate Dictionary, Dictionary of Canadian English, The Senior Dictionary, The Random House Dictionary of the English Language* (College Edition).

General

Students wishing to take English as one of the fields of concentration in their General program should take in their First Year: 3 units from 115, 116, 121, or 122; Second Year: 200, 201, 202, or 203; Third and Fourth Years: a total of 9 units in English courses numbered 300 and above. Students desiring advice about their choice of courses are invited to see the secretary of the Department, who will arrange consultation with Departmental advisers.

Major

Majors are required to take a total of 15 units in English at the senior level, of which 9 units are to be chosen from the Course Structure, and an additional 6 units from courses numbered 300 and above. Normally at least 12 of these 15 units should be completed at the University of Victoria, and no more than 6 units should be from variable content courses (see listing below).

Course Structure for English Major:

(a) At least one course (3 units) from: 200, 201, 202, 203. Students planning to major in English are strongly recommended to take 200.
(b) At least 3 units from 351, 352, 366, 369.
(c) At least 1½ units in addition to (b) requirements, from courses in literature before 1700: 340, 341, 346, 347, 351, 352, 353, 354, 359, 360, 361, 362, 363, 364, 366, 369, 410.
(d) At least 1½ units from courses in literature covering the period 1700-1800: 372, 373, 374, 375, 376.
(e) At least 1½ units from literature 1800-1900: 382, 383, 384, 385, 386, 387, 427, 428.
(f) At least 1½ units from 20th century Canadian, American, British or Commonwealth literature: 388, 402, 429, 431, 432, 433, 434, 436, 437, 439, 450, 451, 452, 453, 457, 465.

NOTE: Students who have credit for courses in English not now included in the Calendar should see the Director of the Major Program for advice in following the course structure.

The Department strongly recommends that students majoring in English have a reading knowledge of a second language and/or that they take courses in literature in translation of another culture. Students planning any postgraduate work are reminded that graduate schools generally require competence in at least one language other than English.

Honours

The Honours Program allows students of proven ability to study English language and literature more intensively than is possible in the Major or General Programs. While enjoying a comprehensive course structure, Honours students also participate in special seminars and receive the guidance of individual tutors in connection with English 490/491 and 499. Students who take a special interest in English language or literature, or who are contemplating postgraduate study in English, are strongly advised to enroll in Honours rather than in the General or Major Program. An English Honours degree is valuable for any career demanding clear thinking and writing.

Normally Honours students will follow this pattern:

First Year: 121, 122 (200 may also be taken in the first year with permission of the Department).

Second Year: 200, 310, plus some electives (e.g. Classics, History, Philosophy) and/or some upper level English courses, with reference to the course structure below. Students may take 310 in their third year, but this option tends to limit one's flexibility in choosing elective courses in the third and fourth years. For the same reason, it is also to a student's advantage to begin work on the second language requirement by the beginning of the second year.

Third and Fourth Years: Prerequisites for admission to Third Year Honours include a first or high second class grade in 200 or 310 and the approval of the Department. Honours students must present *at least* 24 units of English courses numbered 300 and above, to be distributed according to the following course structure:

(a) 340 or 440, 445 (Third Year Honours courses, 1½ units each). Linguistics 390 may be substituted for 340 or 440 with permission of the Director of Honours;
(b) 460, 499 (Fourth Year Honours courses, 1½ units each); in some circumstances, 461 or 462 may be substituted for 460 with permission of the Director of Honours;
(c) 351 (*The Canterbury Tales*);
(d) Either 366 (Shakespeare Survey, 3 units) *or* 360 (Special Studies in Shakespeare, 1½ units);
(e) At least 1½ additional units from the period before 1660: 340, 341, 346, 347, 352, 353, 354, 359, 360, 361, 362, 363, 364, 369, 410;
(f) At least 1½ units from the period 1660-1800: 372, 373, 374, 375, 376;
(g) At least 1½ units of American or British literature from the period from 1800-1900: 382, 383, 384, 385, 386, 387, 394, 427, 428
(h) At least 1½ units of 20th Century American, British or Commonwealth literature: 388, 425, 426, 429, 431, 432, 433, 434, 436, 437, 439. Students with 201/203 may apply for waiver of this requirement.
(i) At least 1½ units from Canadian literature: 448, 450, 451, 452, 453, 457. Students with 202 may apply for waiver of this requirement.
(j) Electives: at least 6 units (or 7½ units if 360 has been taken instead of 366) from English courses numbered 300 and above. Students who choose Linguistics 390 for the (a) requirement must add 1½ units of 300 and above English electives.

At the end of the Fourth Year, there will be an interview at which students will defend their projects undertaken for 499.

Combined English Honours and Medieval Studies Minor

Students in the English Honours Program who satisfy the (e) requirement and 1½ units of the (j) requirement as described above with courses from the following list: 340, 341, 346, 347, 352, 353, 354 may earn a combined English Honours and Medieval Studies Minor degree, if they complete in addition MEDI 301 and MEDI 302, together with a further 3 units selected from the Medieval courses (apart from the English courses) which are included in the list of Suggested Courses for the Medieval Studies Program. (See page 118)

COMBINED MAJOR IN ENGLISH AND FRENCH(CANADIAN LITERATURE)

The Combined Major in English and French (Canadian Literature) is not a double major in English and French, but a single B.A. degree program composed of selected courses from each department. The term "Canadian Literature" will be formally recognized on the transcript. Students should consult either department about choice of courses.

First year

Two of ENGL 115, 116, 121, 122	(3)
FREN 180	(3)
HIST 130 (may be taken in a later year)	(3)
Electives	(6)
	(15)

Second year

One of ENGL 200, 201, 202, 203	(3)
FREN 286/287/290	(6)
Electives	(6)
	(15)

Third and Fourth years

Courses selected from English Major Course Structure, b) through e), page 74	(7½)
ENGL 458 (FREN 487)	(1½)
FREN 302	(3)
Courses selected from French courses numbered 320 to 470	(3)
Canadian Literature courses, of which at least 4½ upper level units must be taken in each Department	(10½)
Electives	(4½)

Counselling

The programs of Honours students are subject to the approval of the Director of Honours Programs, and the choice of electives is subject to modification in light of the student's entire program. Special counselling for students entering the Honours Program, as well as for those already enrolled in it, is available from the Director, who should be consulted as soon as a student develops an interest in the Program.

Second Language Requirement

English Honours students must demonstrate knowledge of a language other than English. Normally the language will be one that has an important literary or historical bearing on the study of English, such as Greek, Latin, French, Italian, German, Russian or Spanish; a student may petition, however, to substitute another language such as Chinese or Japanese. Students may fulfill the requirement in two ways:

(a) by completing successfully six units of university credit in the study of the language (this method is recommended for all students, particularly those intending to pursue postgraduate study);
(b) by passing a translation examination set and marked by the appropriate language department (normally these examinations are available only to students who have completed one year of university work in the language).

Standing at Graduation

An Honours degree is either First or Second Class. A First Class degree requires a first class graduating average (6.50 and above) and at least a B+ in 499 (the Graduating Essay). If an Honours student has a first class graduating average but has scored lower than B+ in 499, the student will be given the option of receiving Second Class Honours or a First Class Major. A Second Class Honours degree requires a second class graduating average (3.50 to 6.49) with at least B- in English 499.

Directed Reading

490 and 491 (Directed Reading) are tutorials of 1½ units each which are set up by students and individual instructors and approved by the Director of Major Programs or the Director of Honours Programs *and* by the Chair of the Department. Only students with Honours standing or a G.P.A. of 6.00 or better may be allowed to pursue studies in Directed Reading.

Variable Content Courses

The English Department offers a number of variable content courses, with topics advertised annually (353, 360, 362, 372, 385, 388, 391, 392, 393, 394, 399, 400, 404, 405, 415, 425, 426, 438, 447, 448, 449, 462). Where content differs, such courses may be taken more than once for credit, to a maximum of 3 units.

Course Challenge

The English Department does not permit students to gain credit by course challenge; students may, however, apply to the appropriate Director (First Year, Majors, or Honours) for waiver of prerequisites in special cases.

Suggested Electives

The Department encourages its students to take elective courses supportive to their General, Major or Honours programs. In making their choice of electives, students may wish to give special consideration to relevant courses in Anthropology (e.g. 200); Classics (e.g. 100, 200); Creative Writing; History (e.g. 130, 220); History in Art (e.g. 120, 221); Linguistics; Music (e.g. 110); Philosophy (e.g. 100, 102, 238); Political Science; Psychology; Sociology; Theatre (e.g. 100); and courses in the literature of other languages.

UNDERGRADUATE COURSES

FIRST YEAR

All students registering for an English course must satisfy the University English Requirement — see English Requirement for Undergraduates, page 13. For students with satisfactory standing the Department offers two sequences of one-term courses — 115/116 and 121/122. The development of skills in critical reading, composition, and library use are among the primary objectives of *all* first year courses. 115 stresses expository writing and nonfiction prose, with considerable emphasis on the preparation of a research paper; 116 continues the composition work and provides an introduction to the critical reading of imaginative literature. 121 focuses on the analysis of prose fiction, developing composition skills through the writing of critical essays on novels and short stories; 122 deals with poetry and drama and offers additional practice in the writing of critical essays. Any departure from the normal sequence of 115/116 and 121/122, except as described below, must be authorized by the Director of First Year English.

Those students who, on the basis of their score on the University of Victoria English Placement Test, are required to take English 099 must register in 099 for the First Term and in English 115 for the Second Term and may not take any other English course until the satisfactory completion of 099. Those who fail 099 in the First Term must repeat the course in the Second Term; any who fail a second time must take and pass the course during the following Summer Studies or they will normally be denied permission to return to the University until they have demonstrated the required level of competence in English. For further information, see English Requirement for Undergraduates, page 12.

Normally, only one English course may be taken in First Term. In special circumstances, however, three units of First Year English may be taken in Second Term, with the permission of the Director of First Year English. Three units of credit in First Year English are prerequisite to all other courses in the Department. No supplemental examinations are permitted in any First Year course.

(Course offering codes: Y = Sept.-Apr., F = Sept.-Dec., S = Jan.-Apr., K = May-Aug., NO = Not offered, this session)

ENGL 099 (0) REMEDIAL ENGLISH COMPOSITION (3 fee units)
A remedial course in writing required of those whose score on the Placement Test indicates serious deficiences in composition skills; a workshop approach provides instruction and drill in the fundamentals of reading comprehension and composition, including vocabulary, grammar, mechanics, sentence structure, and paragraphing. Space in the course may be available for other students with writing difficulties who may be advised to take it. For further information, see note above.
(Grading: COM, N or F)
(3-0)

ENGL 115 (1½) COLLEGE COMPOSITION
A study of expository composition and English prose; readings consist mainly of essays for the analysis of ideas and style. Written assignments are designed to improve the student's ability to write clearly and correctly, to organize material, and to carry out basic library research. Students will write a minimum of six essays, including a substantial research paper. (*Prerequisite:* Fulfillment of the University English Requirement or successful completion of 099)
Members of the Department (3-0)

ENGL 116 (1½) INTRODUCTION TO LITERATURE
A study of prose fiction, poetry, and drama, with practice in the writing of critical essays; students will be assigned a minimum of four essays. Not open to students with credit in 121 or 122 (*Prerequisite:* Fulfillment of the University English Requirement)
Members of the Department (3-0)

ENGL 121 (1½) LITERATURE: PROSE FICTION
An introduction to prose fiction; class discussions and essays focus on the analysis and interpretation of short stories and novels. Considerable time will be spent on the writing of critical essays, with special attention to organization, argument, evidence, style, and, as necessary, to grammar; students will be assigned a minimum of four essays.
Not open to students with credit in 116 (*Prerequisite:* Fulfillment of the University English Requirement)
Members of the Department (3-0)

ENGL 122 (1½) LITERATURE: POETRY AND DRAMA
An introduction to the interpretation of poetry and drama, with continued attention to the writing of critical essays; students will be assigned a minimum of four essays.
Not open to students with credit in 116 (*Prerequisite:* Fulfillment of the University English Requirement)
Members of the Department (3-0)

SECOND YEAR

At least 3 units of credit in First Year English are prerequisite to future work in the Department.

ENGL 200 (3) BRITISH LITERATURE FROM THE AGE OF CHAUCER TO THE ROMANTIC PERIOD
Special emphasis will be placed on works by Chaucer, Spenser, Marlowe, Shakespeare, Donne, Milton, Dryden, Swift, Pope, Fielding, Johnson, Blake, Wordsworth, Coleridge, Keats and Austen. (Open to all students who do not have credit in 204 or 205, but strongly recommended to those who wish to major or honour in English) Texts: *The Norton Anthology of English Literature* (2 vols.); other texts to be announced.
Members of the Department Y(3-0)

ENGL 201 (3) STUDIES IN MODERN LITERATURE
The emphasis will be upon themes important in 20th century literature. Authors to be studied may include Shakespeare, Joyce, Forster, Fitzgerald, Hardy, Hemingway, Camus, Cary, Beckett, Lawrence, Conrad, Tolkien, Bellow, T.S. Eliot.
Members of the Department Y(3-0)

ENGL 202 (formerly 238) (3) AN INTRODUCTION TO CANADIAN LITERATURE
A survey of Canadian literature, introducing major authors and themes and covering a chronological range of fiction and poetry. The primary emphasis is on the 20th century. Poets to be studied may include Roberts, Lampmann, Pratt, F.R. Scott, Birney, Klein, Page, Cohen, Webb, Atwood, and Ondaatje; fiction writers to be studied may include Grove, O'Hagan, Ross, Gallant, Munro, Wiebe, Hodgins, Kroetsch, and Laurence. Texts for each section are chosen by the individual instructors.
M.A. Dean; J.A. Dopp Y(3-0)

ENGL 203 (3) AN INTRODUCTION TO AMERICAN LITERATURE
A survey designed for both those who will continue in American studies and those who will not. Emphasis is on the continuity of the American literary tradition. Readings from the set text will be chosen by the instructor and supplemented by additional readings in the major writers such as Whitman, Hawthorne, Twain, Henry James, Faulkner.
H.F. Smith Y(3-0)

ENGL 215 (1½) THE WRITING OF EXPOSITORY PROSE
This course pays attention to the styles and methods of nonfiction prose writing. It focuses on the development and critical analysis of the student's own writing through numerous and extensive written assignments and through the study of the techniques employed by other writers. The course is open to all students, but is of special relevance to those going into the teaching profession. (Classes will be limited to 20 students. Not open to students with credit for 300)
Members of the Department (3-0)

ENGL 225 (1½) TECHNICAL COMMUNICATIONS: WRITTEN AND VERBAL
Intended to assist students who plan careers in business, government, public service and research institutions, the course is designed to improve written and oral communication skills in a work environment. Its practical basis, which requires the preparation of business letters, internal memoranda and reports, is supplemented by a theoretical outline of basic communication within an organizational structure. The course offers experience of both individual and group problem-solving. (*Prerequisite:* 3 units of first year English or permission of Department) (Classes limited to 16)
Members of the Department (3-0)

ENGL 250 (1½) CONTEXTS OF LITERATURE
This course is an introduction to the relationships between literature and other aspects of our culture. Students may take 250 for a maximum of 3 units of credit. (*Prerequisite:* 3 units of first year English) (NOTE: This course is primarily designed as an elective for students not intending to major in English.)
This Year: Detective Fiction
A survey of mystery writing from the beginnings (Poe, Doyle, Collins) to modern times, with particular attention paid to the development of the detective hero and to the exploration of social issues in this popular genre.
N.C. Smith S(3-0)

THIRD AND FOURTH YEARS

1½ unit courses are numbered 350 and above for convenience, and are at the same level as upper level courses numbered 400 and above.

ENGL 310 (formerly 345) (3) PRACTICAL CRITICISM
A seminar designed to sharpen reactions to a writer's style, and to examine how the design of thoughts creates meaning. Discussions centre upon the way a particular poem, novel or play works in its details and in its overall patterning. Prospective Honours students are strongly advised to take this course in their Second Year. Students will be allowed to select this course only if they have the approval of the Director of Honours.
M.R. Best, A.W. Jenkins, M.K. Louis Y(3-0)

ENGL 340 (formerly 442 and part of 441) (1½) INTRODUCTION TO OLD ENGLISH
An introduction to the language, culture, and literature of Anglo-Saxon England, including the study of prose texts and poetry.
(May not be offered 1992-93)
J.J. Tucker F(3-0)

ENGL 341 (formerly 443 and part of 441) (1½) OLD ENGLISH LITERATURE
A study of *Beowulf* and other Old English texts. (*Prerequisite:* 340)
(May not be offered 1992-93) S(3-0)

ENGL 346 (formerly 355) (1½) AN INTRODUCTION TO OLD ICELANDIC
An introduction to the Old Icelandic language and to the poems and stories — the Eddas and the Sagas — that it preserves.
J.J. Tucker NO(3-0)

ENGL 347 (formerly 356) (1½) OLD ICELANDIC LITERATURE
A study of *Hrafnkel Saga, Bandmanna Saga, Hervarar Saga and Heidreks*, and selected Eddic poems. (*Prerequisite:* 346 or permission of the instructor) NO(3-0)

ENGL 351 (1½) CANTERBURY TALES
An introductory study of Chaucer's poetry focusing specifically on the *Canterbury Tales*.
E. Archibald, A.W. Jenkins F(3-0)
E. Archibald, M.K. Louis S(3-0)

ENGL 352 (1½) CHAUCER AND HIS CONTEMPORARIES
A study of the important works of Chaucer outside the *Canterbury Tales*, primarily *Troilus and Criseyde*, and a selection from his dream visions and lyrics. Other Medieval authors may be studied to illuminate the medieval literary traditions in which Chaucer was writing, or which he later influenced. (May not be offered 1990-91)
E.F. Archibald S(3-0)

ENGL 353 (1½) STUDIES IN MEDIEVAL ENGLISH LITERATURE
A study of the major literary works and genres of the medieval period (excluding Chaucer). The course will centre on specific genres (romance, drama, lyric, etc.), at the discretion of the instructor, with annual advertisement. NO(3-0)

ENGL 354 (1½) OLD AND MIDDLE ENGLISH LITERATURE
A survey of English literary texts of the Middle Ages; selections will range from *Beowulf* to medieval lyrics, morality plays, and romances, as well as major works by the *Gawain* poet, Langland, and the Scots poets. The survey does not include Chaucer. (May be offered 1992-93) NO(3-0)

ENGL 357 (1½) THE POETRY OF THE ALLITERATIVE PERIOD:
Various works within the tradition of Middle English alliterative writings such as Langland's *Piers Plowman, Sir Gawain and the Green Knight, Pearl, The Alliterative Morte Arthur, Winner and Waster*, and other related works in both verse and prose. (May be offered 1992-93) NO(3-0)

ENGL 359 (1½) RENAISSANCE LITERATURE
Major nondramatic literature of the 16th Century. (Not open for credit to students in 419) Texts: Sidney's *Defence of Poesy*; More's *Utopia* and Bacon's *New Atlantis*; lyrics by Sidney and other Elizabethans; and a substantial selection from *The Faerie Queene* (editions to be announced) (May be offered 1992-93)
R.M. Schuler NO(3-0)

ENGL 360 (1½) SPECIAL STUDIES IN SHAKESPEARE
Intensive study of a few plays, with emphasis on related critical issues. Students intending to take this course must have a good knowledge of Shakespeare's work. (May not be offered 1992-93)
This Year: Tragical-comical-historical-pastoral: Shakespeare and Genre
The course will involve the study of a number of plays that in one way or another challenge conventional categorization by genre — comedy, tragedy, farce, melodrama, romance, tragicomedy and so on; in the process the course will examine assumptions behind the traditional genres.
M.R. Best F(3-0)

ENGL 361 (1½) THE METAPHYSICAL POETS
Major emphasis will be on Donne, Herbert, Marvell, Vaughn and Traherne. Special attention will be given to the secular love lyric, as well as to the influence of Christian theology and related philosophical traditions. (May not be offered 1992-93)
P.J. Grant F(3-0)

ENGL 362 (1½) SPECIAL STUDIES IN RENAISSANCE LITERATURE
A study of major literary works, genres, or themes of the English Renaissance chosen by the instructor, with annual advertisement. Emphasis will be on nondramatic works.
This Year: Ben Jonson
A truly renaissance man, Jonson was one of the most individual, controversial, and influential writers of his period. His works are both original and varied: in drama there are tragedies and masques as well as the better-known comic masterpieces; in poetry his range extends from the much-anthologized lyrics to rabelaisian mock-epic; and his prose includes critical exploration of literary topics both specific and general. This course will consider a representative selection.
R.M. Schuler S(3-0)

ENGL 363 (1½) MAGIC, SCIENCE AND RELIGION IN RENAISSANCE LITERATURE
A study of late 16th and 17th century literature in light of the interrelationships between comtemporary magic, science, and theology. A good deal of attention will be paid to this background, but the ultimate purpose of the course is the fuller understanding of the literary texts themselves. Authors to be studied include Marlowe, Shakespeare, Jonson, Donne, Bacon, and Browne. (May be offered 1992-93) NO(3-0)

ENGL 364 (1½) ELIZABETHAN AND JACOBEAN DRAMA
Main emphasis is on such major Elizabethan and Jacobean dramatists as Marlowe, Webster, Jonson, Middleton and Ford. (May not be offered 1992-93)
T.G. Sherwood F(3-0)

ENGL 366 (formerly 413) (3) SHAKESPEARE SURVEY
Lectures on the development of Shakespeare's art in the histories, comedies and tragedies.
M.D. Faber, B.N. Gooch, P.J. Grant, R.M. Schuler Y(3-0)

ENGL 369 (1½) MILTON: MAJOR POETRY AND SELECTED PROSE
(Not open for credit to students with credit in 419)
P.J. Grant S(3-0)

ENGL 372 (1½) SPECIAL STUDIES IN 18TH CENTURY LITERATURE
A study of a major aspect of literature in the century. The specific focus of the course will be determined by the instructor and advertised annually.
This Year: The Rise of the Gothic Novel
A study of the earlier Gothic Novel in English, from 1764 to 1800, showing the development of themes, situations and techniques from Horace Walpole to Ann Radcliffe and Harriet Lee. Some attention will be paid to social and literary background.
P.J. Köster F(3-0)

ENGL 373 (1½) ENGLISH LITERATURE OF THE RESTORATION PERIOD: 1660-1700
Poetry, prose and drama (excluding Milton's) produced between the Restoration of Charles II in 1660 and the close of the 17th century; particular emphasis will be placed upon Dryden and Restoration Comedy. (Not open to students with credit for 371) (May not be offered 1991-92)
P.J. Köster S(3-0)

ENGL 374 (1½) SWIFT, POPE, AND THE LITERATURE OF THE AUGUSTAN AGE: 1701-1745
An intensive study of the great age of English satire, with particular emphasis on Swift, Pope and the other satirists of the reigns of Queen Anne and the first two Georges. (Not open to students with credit for 420)
T.R. Cleary F(3-0)

ENGL 375 (1½) JOHNSON, BLAKE AND THE LATER 18TH CENTURY
Literature of the later 18th century, with particular emphasis on Samuel Johnson and his circle, William Blake, and the poetry of "sensibility".

H.E. Summerfield F(3-0)

ENGL 376 (formerly 423) (3) THE BEGINNING OF THE BRITISH NOVEL IN THE 17TH AND 18TH CENTURIES
Main emphasis is placed on the 18th century novel — with some attention to the social and intellectual background of the period, when this appears to illuminate the novels. (May not be offered 1992-93)
G. Fulton Y(3-0)

ENGL 382 (formerly half of 430) (1½) THE ROMANTIC PERIOD: I
Studies in Wordsworth and Coleridge.
A.B. England F(3-0)

ENGL 383 (formerly half of 430) (1½) THE ROMANTIC PERIOD: II
Studies in Keats, Shelley, and Byron.
A.B. England S(3-0)

ENGL 384 (formerly 424) (3) THE BRITISH NOVEL IN THE 19TH CENTURY
Authors to be studied may include Mary Shelley, Austen, Scott, Bronte,

Disraeli, Collins, Dickens, Thackeray, Eliot, Trollope, Meredith, Hardy, Butler, and Stevenson.
A.B. England, V.A. Neufeldt Y(3-0)

ENGL 385 (1½) SPECIAL STUDIES IN 19TH CENTURY BRITISH LITERATURE
A study of a specific theme, problem or author of the 19th century. The specific topic will be determined by the instructor and advertised annually. (May not be offered 1991-92)

This Year:
Section A: Victorian Tales of Terror
Starting from the background of gothic fiction and from aspects of myth and folklore concerned with the spirit world, the course will introduce the Victorian novel of sensation and its preoccupation with the supernatural. Examples will be drawn from tales primarily intended to produce shocks and thrills as a prelude to more serious presentations of the world of the unseen and the problem of human nature.
R.C. Terry S(3-0)

Section B: Robert Louis Stevenson
A study of the achievements of an important and popular author of the late Victorian period, this course will focus on the development of R.L. Stevenson as a novelist and short story writer. Attention will be paid to Stevenson's contributions to various types of fiction and, especially, to his pioneering work in the English short story. Texts will include *New Arabian Nights, Treasure Island, Kidnapped, The Beach of Falsea, Weir of Hermiston*, and others.
B. Menikoff S(3-0)

ENGL 386 (1½) VICTORIAN POETRY AND THOUGHT: I
Studies in Tennyson and Arnold, with additional readings from such prose writers as Mill, Carlyle, and Newman. (May not be offered 1992-93)
V.A. Neufeldt F(3-0)

ENGL 387 (1½) VICTORIAN POETRY AND THOUGHT: II
Studies in Browning, Hopkins and the pre-Raphaelite poets, with additional readings from such prose writers as Carlyle, Ruskin, Pater, and Morris. (May not be offered 1992-93)
V.A. Neufeldt S(3-0)

ENGL 388 (1½) SPECIAL STUDIES IN 20TH CENTURY BRITISH LITERATURE
This Year: Section A: The Bloomsbury Group
The "Bloomsbury Group" was a loose association of writers, painters, and intellectuals who flourished in the early 20th Century. The course will concentrate on the novels of Virginia Woolf and E.M. Forster, but the range of the group's achievement will also be indicated by reference to Roger Fry, Vanessa and Clive Bell, and Leonard Woolf.
J.G. Hayman F(3-0)

Section B: Writings from the Spanish Civil War
An exploration of writings produced by the Spanish Civil War, with reference to its social, moral and political background. As well as fiction, poetry, and some reference to drama, the course will treat personal memoirs as a literary genre.
C. Doyle F(3-0)

ENGL 391 (1½) SPECIAL STUDIES IN LITERARY GENRE
This Year: Fiction of Nuclear War
In our unstable world the danger of nuclear war remains. How have writers imagined nuclear war and, more importantly, its aftermath? Does the fiction of nuclear war help us to cope with a nightmare we normally repress?
T.L. Williams F(3-0)

ENGL 392 (1½) STUDIES IN A MAJOR FIGURE
This course is intended to provide opportunities for occasional offerings of single authors who do not justify permanent representation as do Chaucer, Shakespeare, Spenser, and Milton.

This Year:
Section A: William Faulkner
An intensive study of the major works of William Faulkner, one of the most important novelists of the 20th Century. Special attention will be paid to Faulkner's variety of fictional methods and to the development of his mythical locale, Yoknapatawpha County.
N.C. Smith F(3-0)

Section B: Charles Dickens
Against a background of ideas and beliefs of the Victorians the course will examine a selection of Dickens's novels with particular focus upon the nature of his comic genius. This will involve discussion of theories of comedy and the novelist's unique blend of what has been called "laughter, scepticism, and carnival." In addition to examining Dickens's roles as entertainer of genius (Leavis), as urgent social reformer (Orwell), as subtle psychologist (Wilson), the course will consider the author as he is currently regarded by critics of the 80's, a creator of myths of renewal.
R.C. Terry S(3-0)

ENGL 393 (1½) MYTH AND LITERATURE
This Year: Goddesses in Fiction and Poetry
This course will explore concepts of female deity in fiction and poetry ranging from the Pre-Raphaelite period to the present. The image of the goddess enters Victorian literature as the embodiment of disorderly psychological forces, and becomes successively a weapon against Christianity, a Muse for Neo-Hellenic radicals and freethinkers, and a focus for contemporary feminism.
M.K. Louis F(3-0)

ENGL 394 (1½) THEMATIC APPROACHES TO LITERATURE: II
NO(3-0)

ENGL 399 (1½) WOMEN AND LITERATURE
A variable content course involving texts by and about women, and examining feminist perspectives on literature.
(May not be offered 1991-92)

This Year:
Section A: 19th- and 20th-Century Women's Poetry
This course will focus on the ways in which 19th- and 20th-century women's poetry reflects and embodies feminist concerns. British, Canadian and American poets will be studied in relation to each other and to the masculine poetic tradition of the time.
J.I. Mitchell S(3-0)

Section B: Literature and the Suffrage Movement
The breakdown of the Victorian consensus on the role of women in the late 19th and early 20th centuries was expressed in the form and content of literary works by women as well as in active political organization; sometimes the two modes overlapped. This course will explore the relationship between the two in works by American, Canadian and British writers such as Kate Chopin, Nellie Mcclung, and Olive Schreiner.
M.A. Dean S(3-0)

ENGL 400 (1½) ADVANCED WORKSHOP IN COMPOSITION
The course will offer workshops in general and specialized kinds of writing. Different sections will concentrate on such problems as stylistics, modern theories of grammar, technical writing, business writing, preparation of briefs and reports. The topic for each section will be announced annually. Classes will be limited to 20 students. The course may be taken for a maximum of 3 units with departmental permission, but only 1½ units may be used to complete the requirements for a general, major or honours program in English.

This Year: Workshop in Expository Prose
The course will offer students practice in the writing and criticism of expository prose. Competence in the English language is a prerequisite.
J.I. Mitchell F(3-0)
W. Benzie S(3-0)

ENGL 402 (1½, formerly 3) CHILDREN'S LITERATURE
The study of a selection of works drawn from various genres and periods of children's literature, including novel, folk tale, myth, fantasy and picture book.
(May be offered 1992-93)
NO(3-0)

ENGL 403 (formerly 302) (1½ formerly 3) LITERARY APPROACHES TO CHILDHOOD
The course explores literary works, mainly of the 20th century, that

dramatize adult attitudes to children and the behaviour of young persons during childhood and adolescence in the context of relevant theories concerning child development. The approach is cross cultural. Supplementary film or other material will be used as available.
(May be offered 1992-93)
NO(3-0)

ENGL 404 (1½) SPECIAL STUDIES IN CHILDREN'S LITERATURE
A study of a special topic in children's literature. The specific topic will be determined by the instructor and advertised appropriately. NO

ENGL 405 (1½) STUDIES IN LITERATURE AND FILM
A study of various relationships between the art of film and relevant literary works. Topics will vary and will be announced annually. English major and honours students may take this course as an elective only. Can be taken more than once for credit, to a maximum of 3 units.
(May not be offered 1992-93)

This Year: Narrative and Cultural Identity
The course will study the adaptations of print texts to film narrative and the use of film narrative to demarcate and dramatize aspects of cultural identity.
C.J. Partridge S(3-0)

ENGL 409 (formerly 365) (1½) THE BIBLE IN ENGLISH
A course in the Bible as Literature, surveying basic books of the Old and New Testaments, such as Genesis, Deuteronomy, Job, Song of Songs, Psalms, selected Wisdom Literature, Isaiah, selected minor prophets, Matthew, John, Acts, selected Pauline epistles, Hebrews and Revelation. Attention will be paid to the historical influence of the English Bible on the style and structure of English literature, as well as to the intrinsic literary features of the Biblical books themselves. (Not applicable as Renaissance credit for Major and Honours students) (May be offered 1992-93) NO(3-0)

ENGL 410 (3) BACKGROUNDS TO ENGLISH LITERARY TRADITIONS
A study of the main currents of thought contributing to late Medieval and Renaissance Literature. The development of literary vocabulary in the Judaeo-Christian tradition. (May be offered 1992-93) NO(3-0)

ENGL 414 (1½) AMERICAN FILM
A study of major accomplishments in American film. The course will consider film as both a narrative form and a means of reflecting social concerns. Some screenplays may be studied, and essays will be required.
NO(3-0)

ENGL 415 (1½) SPECIAL STUDIES IN FILM
A study of a special topic in English-language cinema. NO(3-0)

ENGL 425 (formerly 380) (1½) SPECIAL STUDIES IN THE LITERATURE OF THE UNITED STATES
A study of American literature which will focus attention on a specific theme, problem, genre or author at the discretion of the instructor, advertised annually.

This Year:
Section A: Robert Frost
The course will deal with a sampling of Frost's poetry from each stage of his long poetic development. The primary emphasis will be upon the poems at all times, but Frost's development as a poet and his unusual gift for incorporating the intellectual complexities of modern poetry into verse of striking clarity and accessibility will also be implicitly and explicitly considered.
T.R. Cleary F(3-0)

Section B: Hemingway, Bellow, and the Nature of Being
The course represents a critical assessment of two important 20th century American writers in juxtaposition for the purpose of creating a literary dialogue on human nature.
E.R. Zietlow S(3-0)

ENGL 426 (1½) COMPARATIVE STUDIES IN NORTH AMERICAN LITERATURE
A variable-content course which focuses on comparisons and contrasts between the literatures of Canada and the United States. The specific topic or theme will be determined by the instructor and advertised annually.

This Year: Margaret Atwood and Marge Piercy
This course will compare the fiction and poetry of American author Marge Piercy with Canadian Margaret Atwood, in the light of the issues their works present. Topics of discussion will include the problem of accommodating female experience in traditional narrative, feminism and literary representation, Canadian feminism and its relationship to U.S. imperialism, strategies for political action.
M.A. Dean F(3-0)

ENGL 427 (1½) THE AMERICAN RENAISSANCE
A study of the period 1840-1860 which saw the rise to full maturity of a distinctively American literature. Emphasis will be placed on the major figures — Poe, Emerson, Thoreau, Hawthorne, Dickinson, Melville, and Whitman — and on the literary developments and movements in prose and poetry.
H. Smith F(3-0)

ENGL 428 (3) AMERICAN FICTION TO 1900
A survey of major American fiction in the 19th century. The first term will be a survey of the period from Brockden Brown, Cooper and Hawthorne to Crane, Norris and Dreiser; the second term will be an intensive study of the development and achievement of three major figures: Melville, Twain and James. (May not be offered 1992-93)
H.F. Smith Y(3-0)

ENGL 429 (3) 20TH CENTURY AMERICAN FICTION
The primary aim of the course is critical study of major texts. The secondary aim is to relate them to the social and intellectual background of the period. Authors will include: Stein, Anderson, Hemingway, Fitzgerald, Faulkner, Steinbeck, Penn Warren, Mailer, Ellison, Baldwin, Bellow, Malamud, Barth, Styron and Vonnegut. (May be offered 1991-92)
E.R. Zietlow Y(3-0)

ENGL 431 (formerly 435) (1½, formerly 3) MODERN AMERICAN POETRY: I
Readings in American poetry of the period 1910-50. The main poets studied will be Robert Frost, Wallace Stevens, William Carlos Williams, and Hart Crane. Contextual reference will be made to other poets such as Marianne Moore, E.E. Cummings, and the Fugitives. (Intend to offer 1991-92)
C. Doyle S(3-0)

ENGL 432 (1½) MODERN AMERICAN POETRY: II
Detailed study of poets and poetry movements since 1950 such as the following: John Crowe Ransom, Allen Tate and the Fugitive Group; Charles Olson and the Black Mountain Movement; Allen Ginsberg, Gary Snyder and the Beat Generation; Robert Bly and "deep image" poetry; Robert Lowell, Sylvia Plath, and the confessional poets; John Berryman, Theodore Roethke, John Ashbery. (May be offered 1992-93)
NO(3-0)

ENGL 433 (1½) MODERN ANGLO-IRISH LITERATURE
Focuses primarily but not exclusively on the Irish Renaissance; emphasis will be placed on Wilde, Yeats, and Joyce, and other authors to be studied may include Shaw, Synge, Stephens, O'Casey, Clarke, O'Connor, and Beckett. The background of ideas and social forces in the period will receive some attention. NO(3-0)

ENGL 434 (1½) BRITISH POETRY FROM 1914 TO THE PRESENT DAY
This course will include discussion of the main poetic movements of the period, together with explanations of the work of individual poets, such as Wilfred Owen, T.S. Eliot, David Jones, Dylan Thomas, W.H. Auden, W.B. Yeats, D.H. Lawrence, Hugh MacDiarmid, and others. (May not be offered 1992-93)
H.E. Summerfield S(3-0)

ENGL 436 (3) 20TH CENTURY BRITISH FICTION
Close study of one or more of the works of prominent novelists. Emphasis is both critical and historical. Essays are required and students are urged to form their own judgments with little reference to the works

of critics. The course may include the following authors: Joseph Conrad, E.M. Forster, James Joyce, Virginia Woolf, D.H. Lawrence, Evelyn Waugh, Graham Greene, Samuel Beckett, Anthony Burgess, Margaret Drabble, Iris Murdoch, William Golding, Ian McEwan, Fay Weldon and John Fowles.
T.L. Williams Y(3-0)

ENGL 437 (3) BRITISH AND AMERICAN DRAMA SINCE WORLD WAR I
A study of the play as a literary form and an examination of styles, techniques, themes and moods which have been explored in 20th century drama, including a brief historical survey of the 19th century theatre. Some attention will be paid to the techniques of acting and direction, theatre design, and audience requirements which have influenced the playwright; however, this is not a practical theatre course. Essay topics will encourage development of the student's own critical ability. Throughout, concentration will be on the text rather than on the works of critics.
A.W. Jenkins, G.V. Baillargeon, D. Thatcher Y(3-0)

ENGL 438 (1½) SPECIAL STUDIES IN COMMONWEALTH LITERATURE
The course studies representative literary works from one or two regions of the Commonwealth.

This Year: South African Poetry in English
South African poetry in English (and in translation) written during the past century, with emphasis on poetry of the last fifty years will be studied. Colonial poetry, the dilemma of the white liberal writer, the theme of exile, black renaissance, people's poetry, and the current process-product debate between various poets and critics will be covered. Writers such as Roy Campbell, Arthur Nortje, Bvy Butler, Lionel Abrahams, Ruth Miller, Mongane Wally Serote, Sipho Sepamela, Douglas Livingstone, Ingrid Fiske and others will be discussed.
D. Haarhoff F(3-0)

ENGL 439 (3) COMMONWEALTH LITERATURE
The course offers an introduction to the literature of new and emergent countries. It will discuss problems of regionalism, immigration, native rights and national myths as processes of self definition. Works from Australia, New Zealand, the Caribbean and sub-Saharan Africa will be studied; comparisons will be made with aspects of Canadian cultural development. (May not be offered 1992-93)
C.J. Partridge Y(3-0)

ENGL 440 (1½) THE HISTORY OF THE ENGLISH LANGUAGE
A survey of the development of the English Language from its Germanic origins to the 19th century, with particular reference to semantic, etymological, phonetic, morphological and syntactic modifications of primary importance to an understanding of English literature. (*Prerequisites:* Honours standing in Third or Fourth Year) (May be offered 1992-93) NO(3-0)

ENGL 445 (1½) THIRD YEAR HONOURS SEMINAR: THE HISTORY OF ENGLISH PROSE STYLE
A historical and critical survey up to the present day. This course illustrates, through the study of representative prose, the interplay between the mind of the writer and the historical context. (Not open to students with 3 units credit for 446)
W. Benzie F(3-0)

ENGL 448 (1½) SPECIAL STUDIES IN CANADIAN LITERATURE
A study of a major theme, problem, genre or author in Canadian Literature, determined by the instructor and advertised annually.
This Year: Autobiography in Canada
A study of Canadian autobiography by both female and male authors, with reference to the major theories defining the genre.
S. Kamboureli S(3-0)

ENGL 449 (1½) SPECIAL STUDIES IN CONTEMPORARY LITERATURE
A study of significant literary works published during the past 15 years. The course will focus on themes and issues engaged by authors from throughout the English-speaking world. (Sample authors: Patrick White, John Fowles, Robertson Davies, Chinua Achebe, John Ashbery, Ian McEwen)

This Year: Frontiers of Feminism: Literary Inter-Face in Southern Africa
The literary response of a century of southern-African women's writing as it addresses the colonial frontier ethos and the struggle for independence will be examined. Using fiction, autobiography, poetry, drama, and diary, it will also explore the contradictions in the emerging post-colonial society as it influences issues of feminist writing.
D. Haarhoff F(3-0)

ENGL 450 (1½) MODERN CANADIAN FICTION: I
A study of important Canadian authors who came to prominence in the two decades following World War II; major figures considered may include Hugh MacLennan, Mordecai Richler, Ernest Buckler, Robertson Davies, and Margaret Laurence. Some attention will also be paid to the development of the short story in these years.
S. Kamboureli F(3-0)

ENGL 451 (1½) MODERN CANADIAN FICTION: II
A study of Canadian novelists and short story writers who have achieved recognition in recent years; major figures considered may include Margaret Atwood, Alice Munro, Robert Kroetsch, Rudy Wiebe, and Jack Hodgins.
J.A. Dopp F(3-0)

ENGL 452 (formerly part of 397) (1½) MODERN CANADIAN POETRY: I
A study of important Canadian poets who came to prominence in the two decades following World War II; major figures considered may include F.R. Scott, Dorothy Livesay, Earle Birney, Irving Layton, Leonard Cohen, and P.K. Page. (Intend to offer 1991-92)
B.N. Gooch F(3-0)

ENGL 453 (formerly part of 397) (1½) MODERN CANADIAN POETRY: II
A study of Canadian poets who have achieved recognition in recent years; major figures considered may include Phyllis Webb, Al Purdy, Margaret Atwood, and Michael Ondaatje.
J.A. Dopp S(3-0)

ENGL 457 (formerly 438) (3) TRADITIONS IN CANADIAN LITERATURE
Important figures in Canada's literary development, with substantial consideration of historical, geographical, social, literary, and aesthetic influences in English and French-Canadian literature during the 19th and 20th centuries; amongst the authors to be included: Moodie, Hemon, Leacock, Grove, Pratt, MacLennan, Blais, Laurence, Davies, Ryga, Reaney, Hebert, Atwood, Layton, Birney, Avison, and selected contemporary writers.
S. Kamboureli Y(3-0)

ENGL 458 (FREN 487) (1½) COMPARATIVE STUDIES IN FRENCH AND ENGLISH CANADIAN LITERATURE
An introduction to the comparative study of Canadian Literature in both official languages. Classes will be conducted in English; readings and assignments can be done in either language. However, students taking a Combined Major in Canadian Literature must read the texts in the original.
M. Vautier F(3-0)

ENGL 459 (1½) EARLY CANADIAN PROSE LITERATURE
A study of English Canadian prose literature from its beginnings to the early twentieth century. Main focus will be on the development of the novel, but attention will also be paid to the short story and non-fiction prose. Authors may include John Richardson, William Kirby, Susanna Moodie, Sara Jeannette Duncan, F.P. Grove, Martha Ostenso, Morley Callaghan, Sinclair Ross, and Howard O'Hagan. (3-0)

ENGL 460 (formerly 446) (1½) FOURTH YEAR HONOURS SEMINAR
A seminar in the history of critical theory, with a study of its relation in practice to specific genres and styles.
B. Menikoff S(3-0)

ENGL 461 (1½) INTRODUCTION TO CONTEMPORARY LITERARY THEORY

Literary theory studies what literature is, how it functions, and how it produces meaning. On the one hand, literary theory illuminates the norms, conventions, and rules that make literature possible. On the other hand, literary theory reflects on the function and meaning of criticism itself. Students will become familiar with such theories as New Criticism, Structuralism, Psychoanalytic theory, Hermeneutics, Deconstruction, Marxist Criticism, and Feminist Criticism; they will then be able to work with theoretical concepts, issues, and terminology. (Not open to students who have credit for this course as 447)

T.A. Myrthen S(3-0)

ENGL 462 (1½) STUDIES IN MODERN CRITICAL THEORY

A study of selected topics in modern literary theory and criticism. The specific topic will be advertised annually. (May not be offered 1991-92)

This Year: Contemporary Narrative Theory

Narrative theory is the systematic study of the nature, form, and function of narrative. It examines what all narratives have in common and what allows them to be narratively different. The course will explore structuralist developments in narrative theory (Propp, Chatman, Barthes, Genette, Scholes) and more recent poststructuralist concerns with narrative desire (Chambers, Culler, Brook, and two collections of essays). The main topics will be narrative structure (the distinctive features of any story), narrative discourse (the possible kinds of narrators, narratees, and narrations), narrative as process (the act of narrating and its specific functions), and narrative desire (the way narratives are generated and resisted).

E.M. Cobley S(3-0)

ENGL 465 (1½) MODERNIST POETRY (YEATS, POUND AND ELIOT)

A course on the three major international Modernist English-language poets. (May not be offered 1991-92)

C. Doyle F(3-0)

ENGL 490 (1½) DIRECTED READING IN ENGLISH

A specified reading project in some area of English literature to be determined by the student and the instructor; written assignments will be required. Students registering for this course must first obtain the approval of the individual instructor, the Director of Majors or Honours, and the Chair of the Department. (NOTE: Please consult Department policy on "Directed Reading" in the General Information section.)

(3-0)

ENGL 491 (1½) DIRECTED READING IN ENGLISH

Further supervised study in some area of English literature; written assignments will be required. Students registering for this course must first obtain the approval of the individual instructor, the Director of Major Programs or the Director of Honours Programs, and the Chair of the Department. (Persons who have received three units of credit for 490 prior to 1976-77 will not be allowed to take 491.) (NOTE: Please consult Department policy on "Directed Reading" in the General Information section.) (3-0)

ENGL 499 (1½) GRADUATING ESSAY OR DIRECTED READING PROJECT IN HONOURS

The graduating essay or directed reading project will be done under the guidance of an individual tutor assigned in Third and Fourth years. (*Prerequisite:* Honours standing in Fourth year) (0-0-2)

ENVIRONMENTAL STUDIES PROGRAM

Paul R. West, B.Sc., Ph.D. (McM.), Associate Professor, Chemistry and Director of the Program

Duncan M. Taylor, B.A. (Queen's), Ph.D. (Calif.-Santa Cruz), Assistant Professor

Advisory Committee:

George A. Beer, B.A.Sc. (Brit. Col.), Ph.D. (Sask.), Professor, Physics. Term expires July 1, 1992

Alan R. Drengson, B.A., M.A. (Wash.), Ph.D. (Ore.), Associate Professor, Philosophy. Term expires July 1, 1991

Derek V. Ellis, B.Sc. (Edin.), M.Sc., Ph.D. (McG.), Professor Biology. Term Expires July 1, 1992.

Stephen C. Lonergan, B.Sc. (Duke), M.A., Ph.D. (Penn.), Associate Professor, Geography. Term expires July 1, 1992.

Douglas G. Morton, R.C.A., Professor, Visual Arts. Term expires July 1, 1991

Michael J. Prince, B.A. (Car.), M.P.A. (Queen's), Ph.D. (Exe.), Professor, Human and Social Development. Term expires July 1, 1991.

Michele Pujol, M.A. (Wash.), Ph.D. (S. Fraser), Assistant Professor, Women's Studies. Term expires July 1, 1992.

T. Murray Rankin, B.A. (Queen's), LL.B. (Tor.), LL.M. (Harv.), Professor, Law. Term expires July 1, 1991

Hans-Holger Rogner, Dipl.Ind.Eng., Ph.D. (Karlsruhe), Visiting Associate Professor, Mechanical Engineering. Term expires July 1, 1992

Gloria J. Snively, B.Sc. (Portland St.), Ph.D. (Brit. Col.), Assistant Professor, Education. Term expires July 1, 1991

Gerald R. Walter, B.A., M.A., Ph.D. (Calif.), Professor, Economics. Term expires July 1, 1992

Student Representatives:

Dawne Kirwan

Susan Ross

Joyce Johner

The Environmental Studies Program is designed to provide students with a broad perspective on the environment. Although a number of departments have developed curricula which provide their students with in-depth preparation for addressing environmental issues from their disciplinary perspectives, the role of the Environmental Studies Program is to integrate the knowledge and methodology from a wide range of viewpoints. Environmental problems by nature encompass more than a single area; hence the need for an interdisciplinary program.

The Program is structured to serve those students with a general academic interest in environmental topics as well as those with a professional interest in the environment. It aims to solve complex environmental problems through a broad understanding of what each of the disciplines can contribute to this process. Since the courses in the Program consider natural, human and cultural phenonema in the context of technology and environmental management, they provide a useful basis for the interdisciplinary study of environmental issues.

Students are required to combine studies in a traditional discipline with their Environmental Studies Program in order to obtain a degree notation that includes Environmental Studies. Students undertake the Major in Environmental Studies together with a Major in another department (a Double Major — see page 35) or a Major with an Honours Program (Honours/Major — see page 36) or with a major in another faculty (see Interfaculty Double Major, page 36). These programs lead to either a B.A. or a B.Sc. degree. A General Program leading to a B.A. is also offered. By completing the requirements for the General Program together with a Major or Honours Program in another department or faculty, students may obtain a Minor (see Minor and Interfaculty Minor, page 36). Students considering the Environmental Studies Program are advised to contact the Director for counselling and to register in the Program as soon as possible.

Although entry into the Program is possible at any time during undergraduate studies, many eligible courses in the Environmental Studies Program are 300 and 400 level courses with prerequisites; students should therefore plan early to incorporate these prerequisites into their schedule.

When choosing electives, the student is also encouraged to include courses in French and in areas other than the one in which the student is majoring, e.g., if the student is majoring in Science, electives should be chosen from the Social Sciences or Humanities.

MAJOR AND GENERAL PROGRAMS IN ENVIRONMENTAL STUDIES

MAJOR

(a) Completion of another Major or Honours program in the Faculty of Arts and Science, i.e., only a double Major or Honours/Major program is available. In consultation with the Program Director, students may apply for the Interfaculty Double Major (page 36) which involves completing the major in Environmental Studies and the appropriate degree program in another faculty.

(b) Completion of ES 101 (GEOG 101A), and an additional 4½ units of lower level (first and second year) courses in the Sciences, Social Sciences and Humanities from at least two areas (no more than three units from any one department), selected from the following:

Science

BIOC 201 (1½)
BIOL 150A (1½) and 150B (1½)
CHEM 100 (1½), 101 (1½), 102 (1½)
PHYS 100 (1½), 102 (3), 110 (1½)

Social Sciences

ANTH 100A (1½), 100B (1½)
ECON 201 (1½), 202 (1½)
GEOG 101B (1½), 203A (1½), 203B (1½), 205A (1½), 205B (1½)
POLI 100 (3), 250 (1½)

Humanities

CLAS 100 (3)
ENGL 115 (1½), 121 (1½), 215 (1½), 225 (1½)
HIST 105 (3), 260 (1½)
PHIL 100 (3), 222A (1½), 222B (1½), 232 (1½)
WS 200A (1½), 200B (1½)

(c) Three units in quantitative concepts and methods, preferably through CSC 100 or 110 and STAT 250, or STAT 250 followed by CSC 200, but this requirement may also be met by the following alternative courses: ANTH 316/317, BIOL 250/251, ECON 240/340, GEOG 321/425 or 425/426, PHIL 203, PSYC 300A/300B, SOCI 371/471, or STAT 250/251. When the outside Major or Honours program requires the three units of quantitative concepts/methods, the course(s) chosen to satisfy this requirement may form part of that Major or Honours program.

(d) A minimum of fifteen upper level Environmental Studies units selected as follows:

(i) Nine units of upper level core course requirements to be taken in the third and fourth years:
ES 300A (1½), ES 300B (1½), ES 410 (1½), 4½ units selected from ES 310 (BIOL 306) (1½), ES 312 (ECON 330) (1½), ES 314 (PHIL 333) (1½), ES 316 (GEOG 350A) (1½).

(ii) Six additional units selected from the following list:

Environmental Studies

ES 310 (1½), 312 (1½), 314 (1½), 316 (1½), if not selected in (i) above
ES 350 (1½), ES 351 (1½)
ES 400A-D (1½ each)
ES 412 (1½), 414 (1½)
ES 490 (1½-3)

Sciences

BIOC 300 (3) General Biochemistry
BIOL 408 (1½) The Biology of Pollution
CHEM 302 (1½) Industrial Chemistry with Special Reference to Air Pollution
CHEM 303 (1½) Industrial Chemistry with Special Reference to Water Pollution
PHYS 310A (1½) Physics and Technology of Energy

Social Sciences

ANTH 304 (1½) Technology in Culture
ANTH 401 (1½) Cultural Ecology
ECON 430A (1½) Natural Resource Economics
ECON 430B (1½) Topics in Natural Resource Economics
GEOG 450A (1½) Decision Making in Resource Management: Theory
GEOG 450B (1½) Decision Making in Resource Management: Practical Applications
GEOG 459A (1½) Recreation Resource Analysis: Concepts
GEOG 459B (1½) Recreation Resource Analysis: Parks and Wilderness
POLI 457 (1½) The Politics of Environmental and Natural Resource Policy
PSYC 350 (3) Environmental Psychology

Humanities

CLAS 376 (1½) Ancient Science and Technology
HIST 396 (1½) Special Topics in the History of Science
LA 306 (1½) Ideas and Perspectives in Western Civilization: I
LA 307 (1½) Ideas and Pespectives in Western Civilization: II
PHIL 332 (1½) Philosophy and Technology

Note: None of the courses selected in (d:i) and (d:ii) will be counted toward the Environmental Studies Major if they are declared as part of the outside Major or Honours requirements. With the written approval of the Director, other lower level courses may be approved under (b) above, and other upper level courses under (d:ii) above.

GENERAL

(a) Completion of ES 101 (GEOG 101A), and an additional 4½ units of lower level (first and second year) courses in the Sciences, Social Sciences and Humanities, from at least two areas (no more than three units from any one department), selected from the following:

Science

BIOC 201 (1½)
BIOL 150A (1½) and 150B (1½)
CHEM 100 (1½), 101 (1½), 102 (1½)
CSC 100 (1½) or 110 (1½), 200 (1½)
PHYS 100 (1½), 102 (3), 110 (1½)
STAT 250 (1½)

Social Sciences

ANTH 100A (1½), 100B (1½)
ECON 201 (1½), 202 (1½)
GEOG 101B (1½), 203A (1½), 203B (1½), 205A (1½), 205B (1½)
POLI 100 (3), 250 (1½)

Humanities

CLAS 100 (3)
ENGL 115 (1½), 121 (1½), 215 (1½), 225 (1½)
HIST 105 (3), 260 (1½)
PHIL 100 (3), 222A (1½), 222B (1½), 232 (1½)
WS 200A (1½), 200B (1½)

(b) Six units of upper level core course requirements to be taken in the third and fourth years, selected as follows: ES 300A (1½), and 4½ units selected from ES 310 (BIOL 306) (1½), ES 312 (ECON 330) (1½), ES 314 (PHIL 333) (1½), and ES 316 (GEOG 350A) (1½).

(c) Three additional units of third or fourth year Environmental Studies courses, chosen from ES 300B, 350, 351, ES 400A-D, ES 410, ES 412, ES 414. The course not selected in (b) above may also be chosen.

Note: With written approval of the Director, other lower level courses may be approved under (a) above.

MINOR

Completion of the general program as well as the requirements for another Major or Honours program in the Faculty of Arts and Science is required to obtain the Minor designation in Environmental Studies.

By completing the general program in Environmental Studies, and the requirements for a degree in another faculty, a student may obtain a Minor. See Interfaculty Minor (page 36).

None of the courses chosen in (b) and (c) will be used toward the Environmental Studies Minor if they are declared as part of the outside

Major or Honours requirements.

Note: Students who have registered in one of the options of the Environmental Studies Program described in a previous calendar will be allowed to complete that option if they so wish. Alternatively they may wish to modify their program as described above in order to receive the Major or Minor designation.

COURSES

(Course offering codes: Y=Sept.-Apr., F=Sept.-Dec., S=Jan.-Apr., K=May-Aug., NO=Not offered, this session.)

ES 101 (GEOG 101A) (1½) SOCIETY AND THE PHYSICAL ENVIRONMENT
An integrated introductory description and analysis of the atmosphere, hydrosphere, lithosphere and biosphere. An introduction to the study of natural resources and contemporary problems in resource management.
P. Dearden, M. Edgell FS(2-2)

ES 300A (formerly part of 300) (1½) ENVIRONMENTAL PERSPECTIVES
An examination of a number of persistent themes and dilemmas underlying selected environmental issues of current interest. In order to develop an historical and cultural perspective of nature, attention will be given to the influence of western culture on the human/environment relationship including competing values, political institutions and world views. This course will be conducted as a seminar and will include a term project and a field trip for which a fee will be charged. (Enrollment limited) (*Prerequisite:* third year standing or permission of the Director)
D.M. Taylor FS(3-0)

ES 300B (formerly part of 300) (1½) ENVIRONMENTAL ISSUES
An in depth systematic examination of specific environmental areas through seminars and projects; the development of appropriate responses to questions and problems within the selected areas; modes of interaction and communication with professional and community groups; application of theory to practice; qualitative vs. quantitative research methods. This course will be conducted as a seminar and will include a field trip for which a fee will be charged. (Enrollment limited.) (*Prerequisite:* 300A or permission of the Director) FS(3-0)

ES 310 (BIOL 306) (1½) ECOLOGY
A survey of populations, communities, ecosystems, and the general principles of ecology. Laboratories will deal with both field and experimental aspects of ecology. Simple statistical techniques and computer packages will be used. (Biology honours and major students should take this course in conjunction with BIOL 300.) (*Prerequisite:* BIOL 250 or STAT 250 or equivalent; 251 or STAT 251 recommended) (NOTE: Environmental Studies major students wishing to take ES 310 (BIOL 306) should take STAT 250 as part of their quantitative concepts and methods requirements, page 70, part (c), prior to taking ES 310)
P.T. Gregory, G.A. Allen, D.V. Ellis F(2-3-1)

ES 312 (ECON 330) (1½) ENVIRONMENTAL ECONOMICS
Economic principles as applied to environmental questions associated with B.C. resource exploitation. The problem of spillovers to economic processes. Externalities and their management through economic institutions. Economic aspects of the use and conservation of the environment, particularly regarding energy, forestry, fisheries, mining, air and water. Problem of sustainable production, conservation, and possible limits to economic growth arising from scarcity of environmental resources. (*Prerequisite:* 201 or permission of the Department) (Not open to students with credit in ECON 430, 430A or 430B)
L. Laudadio FS(3-0)

ES 314 (PHIL 333) (1½) PHILOSOPHY AND THE ENVIRONMENT
A philosophical investigation of the moral and conceptual dimensions of environmental problems. Different philosophies of the relation between humans and nature will be compared. Some of the topics to be examined are: human wants and human satisfactions; nature and spiritual values; community; human obligations to other animals; defining quality of life. (*Prerequisite:* third or fourth year standing, or permission of the instructor)
A.R. Drengson F(3-0)

ES 316 (GEOG 350A) (1½) GEOGRAPHY OF RESOURCE MANAGEMENT
An introduction to the geographic study of natural resources: their form, inherent characteristics, and external relations with the geography of the areas in which they are found. Attention will be paid to the way in which resources and their use contribute to the character of areas and the manner in which interrelated aspects of culture — technology, perception, economic and institutional elements — help determine the pattern of use and its areal variations. (*Prerequisites:* GEOG 101A and 101B) F(3-0)

ES 350 (1½) FIELD STUDY
Supervised research or organized projects related to environmental problems, supplemented by directed individual study. A formal report is required. (*Prerequisite:* 300A and permission of the Director) K

ES 351 (1½) WORKSHOP IN ENVIRONMENTAL METHODOLOGY
The course will explore methodology employed in the evaluation of environmental issues including background research, approaches to the public process and analysis of model studies. In consultation with the instructor, students select an environmental theme for detailed investigation. Critique of student seminar presentations based on individual research papers is undertaken. (*Prerequisite:* 300A or permission of the Director) S(3-0)

ES 400A-D (1½ each) TOPICS IN ENVIRONMENTAL STUDIES
The topics covered in this course illustrate issues and methods of environmental studies through consideration of representative problems. Possible topics include: land impact assessment; scientific measures of environmental quality; social evaluation of environmental stress; advanced questions of natural resource or urban environmental management, environmental law. (May be repeated in different topics to a maximum of 4½ units) (*Prerequisite:* 300A or permission of the Director) FS(3-0)

ES 410 (1½) ENVIRONMENTAL IMPACT ASSESSMENT
An introduction to the objectives, philosophy, concepts, methods and social implications of environmental impact assessment (E.I.A.). A critical examination of E.I.A. as an analytical tool in the context of resource management and public policy is undertaken. (*Prerequisite:* 300A or permission of Director) (Not open to students with credit in 400A prior to 1989-90) FS(3-0)

ES 412 (1½) CANADA IN TRANSITION: ECOLOGICAL CHALLENGE AND SOCIETAL RESPONSE
A longer range approach to Canadian policy making must take into account the interdependence and continuous interaction of societal and ecological factors. A major purpose of this course will be to identify environmental and institutional problem areas likely to challenge Canadian society during the 1990s and into the next century, and to analyze their implications for public actions. (*Prerequisite:* 300A or permission of the Director) (Not open to students with credit in 400C prior to 1989-90) S(3-0)

ES 414 (1½) SYSTEMS THEORY: AN INTRODUCTION TO NATURAL AND SOCIAL SYSTEMS
The purpose of this course is to enable each participant to grasp the fundamental principles of systems theory, and to provide a foundation for further exploration and application of systems concepts. The course will examine concepts such as cybernetics, holism, boundaries, negative and positive feedback, self-organization, and transformation. Students will learn to apply these principles to both natural and social systems. This course will be taught as a seminar. (*Prerequisite:* 300A or permission of Director) (Not open to students with credit in 400D prior to 1989-90)
D.M. Taylor F(3-0)

ES 490 (1½-3) DIRECTED STUDIES
Individual studies on approved environmental topics undertaken by students in consultation with faculty members. Projects will be supervised by one or more faculty members designated by the Director. (Restricted to Environmental Studies students.) (*Prerequisite:* 300A and 300B; third year standing with a grade point average of at least 4.50, and permission of the Director)

DEPARTMENT OF FRENCH LANGUAGE AND LITERATURE

Barrington F. Beardsmore, B.A. (Liv.), M.A. (McM.), Ph.D. (Brit. Col.), Associate Professor and Chair of the Department
Elaine Limbrick, B.A. (Lond.), D. de IIIe cycle (Poitiers), Professor
Jennifer R. Waelti-Walters, B.A. (Lond.), L. ès L. (Lille), Ph.D. (Lond.), Professor
John C.E. Greene, B.A., M.A. (Alta.), D. de l'Univ. (Gren.), Associate Professor
Gerald E. Moreau, B.A. (Man.), M.A. (Laval), D. de l'Univ. (Poitiers), Associate Professor
Danielle Thaler, B.A. (Montr.), M.A., Ph.D., (Tor.), Associate Professor
Claire Carlin, B.A. (San Diego St.), M.A., Ph.D. (Calif.-Santa Barb.), Assistant Professor
Emmanuel Hérique, M.A., D. de 3ème cycle (Nancy), Assistant Professor
Yvonne Hsieh, B.A. (Brit.Col.), M.A., Ph.D. (Stan.), Assistant Professor
Marc Lapprand, B.A., M.A., Ph.D. (Tor.), Assistant Professor
Sada Niang, M.A. (Tor.), Ph.D. (York), Assistant Professor
Mary Ellen Ross, B.A. (Dal.), M.A. (Paris, Sorb.), Ph.D. (Tor.), Assistant Professor
Derek J. Turton, B.A. (Leeds), Cert. Ed. (Nott.), M. Phil. (Leeds), Assistant Professor
Marie Vautier, B.A. (Ott.), M.A. (Laval), Ph.D. (Tor.), Assistant Professor

Visiting and Adjunct Appointments:
Essam Safty, B.A., M.A., Ph.D. (Paris, Sorb.), Visiting Assistant Professor (1990-91)
Lucie Daigle, B.A. (Laval), M.A. (U. of Vic.), Visiting Lecturer (1990-91)
Jean-Paul Mas, Baccalauréat en Philosophie (Caen), M.A. (Louisana State), Visiting Lecturer (1990-91)
Danielle H. Shepherd, B.A. (Poitiers), M.A. (Sher.), Visiting Lecturer (1990-91)

GRADUATE PROGRAM

For information on studies leading to the M.A. degree, see page 266.

GENERAL, MAJOR AND HONOURS PROGRAMS

Students interested in pursuing a program in French should consult with a Department adviser as early as possible.

General
First Year: 180 (or 181/182)
Second Year: 290 (or 291/292) and 286/287, which must be completed before entry into fourth year.
Third and Fourth Years: 302 and six units of French courses numbered above 302 (excluding Courses for Teachers).

Major
First and Second Years: as for General program
Third and Fourth Years: 302 and 12 units of French courses numbered above 302 (excluding Courses for Teachers).

Honours
First Year: 180 (or 181/182) and Latin 100.
Second Year: 290 (or 291/292) and 286/287 which must all be completed with an average G.P.A. of 6.00 before admission into the Honours Program.
Third and Fourth Years: 302, 320, 390, 402 and 499 and 12 additional units of French courses numbered above 400, including courses from at least four of the following groups: (i) 425, 426; (ii) 440, 446A, 448; (iii) 409, 446B, 451, 452, 455B; (iv) 446C, 446D, 446E, 460, 462, 466, 470, 488E. (v) 480, 482, 484, 485.

An Honours program in French normally requires a total of 63 units. Admission to the Third Year Honours program requires the approval of the Chair of the Department and the programs of Honours students are subject to the approval of the Honours Adviser. Admission to the Fourth Year Honours Tutorial (499) requires a grade of B or better in 390.

Class of Honours degrees
First and Second Class Honours degrees may be awarded. To obtain a First Class Honours degree a student must achieve: (1) a graduating average of at least 6.50; (2) a grade point average of at least 6.50 in those departmental courses at the 300 and 400 level that are required for the degree program; and (3) a grade point average of at least 5.50 in French 390 and 499. To obtain a Second Class Honours degree, a student must achieve: (1) a graduating average of at least 3.50; (2) a grade point average of at least 3.50 in those departmental courses at the 300 and 400 level that are required for the degree program; and (3) a grade point average of at least 2.50 in French 390 and 499.

A student who fails to meet departmental requirements for first class standing in the Honours program but has a first class graduating average will be offered the choice between Second Class Honours and a First Class Major degree. A student who fails to meet departmental requirements for second class standing but has a second class graduating average will be awarded a Second Class Major degree.

Students wishing to pursue a Double Honours degree which includes Honours in French are reminded that they will have to satisfy the above-mentioned Honours degree class requirements in French.

COMBINED MAJOR IN ENGLISH AND FRENCH(CANADIAN LITERATURE)

The Combined Major in English and French (Canadian Literature) is not a double major in English and French, but a single B.A. degree program composed of selected courses from each department. The term "Canadian Literature" will be formally recognized on the transcript. Students should consult either department about choice of courses.

First year

FREN 180	(3)
Two of ENGL 115, 116, 121, 122	(3)
HIST 130 (may be taken in a later year)	(3)
Electives	(6)
	(15)

Second year

FREN 286/287/290	(6)
One of ENGL 200, 201, 202, 203	(3)
Electives	(6)
	(15)

Third and Fourth Years

FREN 302	(3)
Courses selected from French courses numbered 320 to 470	(3)
FREN 487 (ENGL 458)	(1½)
Courses selected from English Major Course Structure, b) through e), page 66	(7½)
Canadian Literature courses, of which at least 4½ upper level units must be taken in each department	(10½)
Electives	(4½)
	(30)

UNDERGRADUATE COURSES

The full sequence of basic language courses in French is: 100, 160, 180, 290, 302, 402. Students may enter this sequence at different levels; normally, beginners register in 100, students with French 11 in 160 and those with French 12 in 180. Advanced placement, or placement at a lower level than normal, is possible with permission of the Department.

Written permission is required for entry to all first year courses. All students registering in French for the first time at the University of Victoria are urged to consult the Department about placement.

Students who obtain advanced placement may be eligible for credit by course challenge; there are limitations on eligibility. Students should consult the Department.

No student may obtain credit, including transfer credit, for more than nine units of French at the first year level; no student with French 12 may obtain credit for more than six units of French at the first year level.

Courses marked with an asterisk (*) are not offered owing to financial exigency. The Department intends to offer them as soon as funding is available.

Students wishing to take Third and Fourth Year courses to meet requirements for a B.A. degree on the General, Major or Honours program, must satisfy the Department that they have satisfactory stand-

ing in appropriate courses at the 200 level (usually 286/287 and 290). Normally the courses numbered 302 and 350 must be taken in the Third Year.

Students wishing to take as electives those Fourth Year courses without specified prerequisites must satisfy the Department that they have an adequate knowledge of French.

Students wishing to take French 425 are advised that some knowledge of Latin is recommended, although not required.

Students wishing to take senior language courses are advised to take 320 as early as possible.

Advice to Francophone students

Francophone students may not obtain credit for 100, 160, 165, 180, 181, 182, 290, 320 or 350. They will normally begin French studies with 286, 287 or 302. They may take 290, 291 or 292 only with special permission. A Francophone is defined in this context as a person who has spoken French since childhood and who has received sufficient instruction in French to be literate in French.

(Course offering codes: Y = Sept.-Apr., F = Sept.-Dec., S = Jan.-Apr., K = May-Aug., NO = Not offered, this session)

FIRST YEAR

FREN 100 (3) BEGINNERS' FRENCH

An intensive introduction to spoken and written French with emphasis on oral work. Students from this course who are interested in further studies in French will proceed to 160. (*Prerequisite:* None. Not normally open to students having credit in French 11 or its equivalent) (Intend to offer Summer 1992) Y(3-1)

FREN 160 (3) ELEMENTARY FRENCH LANGUAGE

Instruction in written and oral use of the French language based on a language manual and numerous short readings. Regular oral practice and short written assignments will be required. (NOTE: Not normally open to those who have completed French 12) (Not open to students with credit in 165) (Intend to offer Summer 1992) Y(3-2)

FREN 165 (1½) INTENSIVE REVIEW OF BASIC FRENCH

Intended for students whose background in French is beyond the French 11 level, but who require further study before entering 180, this course provides a thorough review of the basic grammar and of every day vocabulary and expression. Regular oral practice and short written assignments are required. (Not open to students with credit in 160)

F(3-2)

FREN 180 (3) FRENCH LANGUAGE AND LITERATURE

A study of French texts, grammar, composition, and pronunciation. (Not open to students who have graduated from the high school French Immersion programes — see 190 — or to students with credit in 181 or 182) Y(3-1)

FREN 181 (1½) FRENCH LANGUAGE AND LITERATURE (A)

The first half of 180, offered in second term. (Not open to students with credit in 180) (Not open to students who have graduated from the high school French Immersion programs — see 190)
G.E. Moreau S(3-1)

FREN 182 (1½) FRENCH LANGUAGE AND LITERATURE (B)

The second half of 180, offered in first term. (Not open to students with credit in 180) (Not open to students who have graduated from the high school French Immersion programs — see 190)
M.E. Ross F(3-1)

FREN 190 (3) LANGUAGE AND LITERATURE FOR IMMERSION STUDENTS

Intended for students who have completed the High School French Immersion program, this course provides practice in writing skills, an introduction to translation and a study of literature of the Francophone world. Y(3-1)

SECOND YEAR

FREN 286 (1½) (formerly half of 285) AN INTRODUCTION TO FRENCH LITERATURE BEFORE 1800

A study of a number of important texts in French literature from the late Middle Ages to the French Revolution. Essays will be assigned, and there will be a final written examination.
C. Carlin, J.C.E. Greene, M.E. Ross FS(3-0)

FREN 287 (1½) (formerly half of 285) AN INTRODUCTION TO FRENCH LITERATURE SINCE 1800

A study of a number of important texts in French literature from the French Revolution to the contemporary period. Essays will be assigned, and there will be a final written examination. (*Prerequisite:* 286, or permission of Chair)
Y. Hsieh, M. Lapprand, D.J. Turton FS(3-0)

FREN 290 (3) FRENCH ORAL AND WRITTEN PRACTICE

A course in composition and translation, based on French texts and given in French, which continues the study of grammatical points presented in 180. Both written and oral proficiency are stressed through weekly assignments and discussions. (*Prerequisite:* A grade of C or higher in 180 or 182, or permission of the Department) (Students are advised to keep their 180 grammar text for reference.) (Not open to students with credit in 291 or 292) Y(3-0-1)

FREN 291 (1½) FRENCH ORAL AND WRITTEN PRACTICE (A)

The first half of 290, offered in second term. (Not open to students with credit in 290) S(3-1)

FREN 292 (1½) FRENCH ORAL AND WRITTEN PRACTICE (B)

The second half of 290, offered in first term. (Not open to students with credit in 290) F(3-1)

THIRD AND FOURTH YEARS LANGUAGE COURSES

FREN 302 (3) COMPOSITION, TRANSLATION AND STYLISTICS

This course, conducted entirely in French, will require frequent written exercises, involving vocabulary and grammar; translation, stylistic commentaries; compositions. (*Prerequisite:* A grade of C+ or higher in 290 or 292, or permission of the department)
G. Moreau, D.J. Turton, M. Vautier Y(3-0)

FREN 320 (1½) FRENCH PHONETICS

The theory and practice of French pronunciation, corrective phonetics, phonetic transcription, intonation, accentuation, syllabification, elision and liaison; training in reading aloud. (*Prerequisite:* 290 or equivalent) (Enrollment limited) FS(2-1)

FREN 350 (3) AN ADVANCED COURSE IN FRENCH WITH CONCENTRATION ON ORAL WORK

This course is designed to increase oral proficiency in French and to develop comprehension of spoken and written French. (*Prerequisites:* normally 286/287 and 290, or permission of the Chair of the Department) (It is recommended that students take 320 before 350, or during the first term of 350) (Enrollment limited)
G. Moreau, D. Thaler Y(4-0-2)

FREN 402 (3) AN ADVANCED LANGUAGE COURSE IN MODERN FRENCH USAGE

A continuation of 302. Written and oral expression through composition, textual analysis, translation and oral presentations, with attention paid to both literary and informal usage. (*Prerequisite:* 302 or equivalent)
E. Hérique, M. Lapprand Y(3-0)

FREN 420 (1½) ADVANCED FRENCH PHONETICS AND PRONUNCIATION

A continuation of 320, with advanced work in corrective phonetics, transcription, intonation and liaison. Also: regional and foreign accents, French phonology, combinatory phonetics (coarticulation). May include the use of sound spectrograms and other instrumental readings. Oral practice, including spoken vs. literary styles, high speed reading, pronunciation of difficult and foreign words. (*Prerequisite:* 320 or equivalent) (Enrollment limited) (Students interested in general

phonetics and phonology should consult the Department of Linguistics.)
E. Hérique S(3-0)

FREN 425 (3) HISTORY OF THE LANGUAGE
A study of the development of the language from earliest to modern times. Some knowledge of Latin is recommended, although not required.
B. Beardsmore Y(3-0)

FREN 426 (3) TRANSLATION
A comparative study of the characteristics of French and English expression and how they pertain to the problems of translation; practice in translation from English to French and from French to English. (Not open to students with credit in LING 426 before 1979-80) (*Prerequisites:* 302 or equivalent, with a grade of B or better, and ENGL 115 or equivalent)
D. Thaler Y(3-0)

LITERATURE COURSES

Students who have taken literature courses in the Department prior to 1979-80 must consult the Department before registering in 400 level literature courses.

FREN 301 (1½ or 3) FRENCH LITERATURE AS AN ELECTIVE
This course permits students to take French literature courses as electives; it cannot be applied to a General, Major or Honours degree in French. Students registered in this course will, with the permission of the instructor, follow one of the regular session literature courses in French. Readings, lectures and discussions will be in French, but written assignments and examinations may be submitted in English. (May be repeated with different content up to a normal maximum of 3 units. A student who has taken a French literature course as 301 may not repeat it under its regular number for credit. Registration by pro forma.)
(3-0)

FREN 390 (1½) CRITICAL METHODS
Intended for Honours students but may be taken as an elective by other students. A survey of modern literary theory (1940-1990, and a practical introduction to recent methods of analyzing literary texts. (*Prerequisites:* 286 and 287)
M. Lapprand F(3-0)

FREN 409 (3) FRENCH THOUGHT AND LITERATURE IN THE 17TH CENTURY
Drama, poetry, the novel and other prose *genres* in the *Grand Siècle*. The Baroque, *Précieux* and Classical periods will be examined. Texts will be selected from the works of Corneille, Molière, Racine, La Fontaine, Pascal, La Rochefoucauld and other major authors. (Not open to students who have credit in 449, 455A)
F(3-0)

FREN 440 (1½ or 3) MEDIEVAL LITERATURE
Study of a number of medieval literary works in the original. Students will learn to read medieval French and acquire some knowledge of the principal literary *genres* of the period. (Intend to offer 1992-93)
B. Beardsmore NO(3-0)

FREN 441 (MEDI 441) (1½) MEDIEVAL ARTHURIAN ROMANCE
Origins and evolution of Medieval Arthurian romance through an examination of representative texts. The language of instruction is English. Students enrolled in FREN 441 must submit all written assignments in French; students enrolled in MEDI 441 must submit all written assignments in English. Students may count only one of 441 and 487 towards a Major, Minor or general program in French.
B. Beardsmore S(3-0)

FREN 446 (1½) FRENCH POETRY
Normally, only one course in French poetry will be offered each year.
(3-0)

446A Renaissance
Late Medieval and Renaissance poetry, with particular emphasis on the Pléiade Group. Major writers studied include Villon and Ronsard. (Not open to students with credit in 445) (Intend to offer 1992-93)
E. Limbrick NO(3-0)

446B 17th Century
Poetry in the 17th century, including Malherbe, La Fontaine and Boileau. Some 18th century poetry may be included. (Not open to students with credit in 445) NO(3-0)

446C Romanticism
Poetry of the late 18th and early 19th centuries, with particular emphasis on the Romantic movement. Major writers studied include Hugo, Lamartine, Vigny and Musset. (Not open to students who have credit for 465)
D.J. Turton S(3-0)

446D Late 19th Century
Baudelaire, Verlaine, Mallarmé, Rimbaud and the Symbolist poets of France and Belgium. (Not open to students who have credit for 468)
J.C.E. Greene F(3-0)

446E 20th Century
Valéry, Claudel, Apollinaire and other poets of the early 20th century; the Surrealist movement; important writers and trends in recent poetry. (Not open to students who have credit for 468) (Intend to offer 1992-93)
Y. Hsieh NO(3-0)

FREN 448 (1½) RENAISSANCE PROSE
Magic, laughter and the pursuit of wisdom in selected works of the French Renaissance. An introduction to major themes in Rabelais and Montaigne. (Intend to offer 1992-93)
E. Limbrick NO(3-0)

FREN 451 (1½) THE ENLIGHTENMENT
Principal literary works of the *philosophes* of the 18th century. (Intend to offer 1992-93)
M.E. Ross NO(3-0)

FREN 452 (1½) THE NOVEL IN THE 17TH AND 18TH CENTURIES
The development of the novel through a study of major texts, with emphasis on the 18th century. (Intend to offer 1992-93)
M.E. Ross NO(3-0)

FREN 455B (1½) COMEDY IN THE 17TH AND 18TH CENTURIES
A literary study of comedy in France in the classical period, with special emphasis on the works of Molière, Marivaux and Beaumarchais.
M.E. Ross F(3-0)

FREN 460 (3) THE NOVEL IN THE 19TH CENTURY
The development of the novel in France during the 19th century, including works by Stendhal, Balzac, Flaubert and Zola. (Not open to students who have credit for 460A or 460B) (Intend to offer 1992-93)
D.J. Turton NO(3-0)

FREN 462 (3) THE NOVEL IN THE 20TH CENTURY
The changing face of the novel from Marcel Proust to Jeanne Hyvrard. A study of major novelists with particular emphasis on their innovative narrative structures.
J. Waelti-Walters Y(3-0)

FREN 466 (formerly part of 465) (1½) 19TH CENTURY THEATRE
Melodrama, the Romantic theatre, *vaudeville* and the Naturalist movement in theatre. Writers studied include Hugo, Musset, Dumas *fils*, Labiche and Becque.
D. Thaler F(3-0)

FREN 470 (1½, formerly 3) MODERN FRENCH THEATRE
A study of the developments and changes in the dramatic literature of 20th century France.
J. Waelti-Walters NO(3-0)

FREN 480 (1½) THE FRENCH-CANADIAN NOVEL FROM THE ORIGINS TO THE MODERN PERIOD
A survey of the French-Canadian novel with special emphasis on the first half of the 20th century. (Intend to offer 1992-93)
G. Moreau NO(3-0)

FREN 482 (1½) CONTEMPORARY FRENCH-CANADIAN NOVEL
The French-Canadian novel in the second half of the 20th century, in particular *la nouvelle écriture* since 1960.
M. Vautier S(3-0)

FREN 484 (formerly half of 481) (1½) CONTEMPORARY FRENCH-CANADIAN THEATRE
Study of the characteristic themes and structures of French-Canadian theatre since the Second World War. (Not open to students with credit in 418)
M.E. Ross NO(3-0)

FREN 485 (formerly part of 483, 481) (1½) FRENCH-CANADIAN POETRY
French-Canadian poetry from Emile Nelligan to the present. Emphasis on Alain Grandbois, St-Denys-Garneau, Anne Hébert, Rina Lasnier, Gaston Miron, Roland Giguère, Michel Beaulieu, Nicole Brossard. (Intend to offer 1991-1992)
M. Vautier F(3-0)

FREN 487 (ENGL 458) (1½) COMPARATIVE STUDIES IN FRENCH AND ENGLISH CANADIAN LITERATURE
An introduction to the comparative study of Canadian Literature in both official languages. Classes will be conducted in English; readings and assignments can be done in either language. However, students taking a Combined Major in Canadian Literature must read the texts in the original. Students enrolled in FREN 487 must submit all written assignments in French; students enrolled in ENGL 458 must submit all written assignments in English. Students may count only one of 487 and 441 towards a Major, Minor or general program in French.
M. Vautier F(3-0)

FREN 488 (1½) SPECIAL TOPICS
Designed for Major and Honours students, this course may be offered as a reading course, a tutorial, or a seminar or a course of lectures (as circumstances warrant). Topics may be selected in one or more of the following: (however, no more than 1½ units from 488 and 489 may be counted toward a General program in French, nor may more than 3 units of 488 and 489 combined be counted toward a Major or Honours program in French.) (3-0)

488A Modern Prose. Major prose writers of the 19th and 20th centuries. Topic for 1991-92: "La Modernité" and its adherents: Flaubert — Breton — Vian — Queneau — Prévert.
M. Lapprand S(3-0)

488C Utopias and Science Fiction
Utopian, anti-Utopian and science fiction writing from the 17th century to the present. (May be available as Directed Studies only) (Intend to offer 1992-93)
J. Greene NO(3-0)

488D French-Canadian Literature Outside Quebec
Literature of French-Canadian minorities in the Maritimes, Ontario and the West, with an emphasis on the period from 1970 to the present. (May be available as Directed Studies only)
M.E. Ross NO

488E African Literature
A survey of African French language writing, with special emphasis on North Africa. F(3-0)

488F Women Writers. A look at the way Francophone women have described the world.
J. Waelti-Walters NO(3-0)

488G Studies in a Major Author or Movement
Intensive study of an important writer or literary movement. When offered, topic will be announced.
C. Carlin NO(3-0)

488H Children's Literature
Examination of the development and diversification of children's literature since the 17th century, in both France and Quebec. (Not open to students with credit in 488B)
D. Thaler S(3-0)

FREN 489 (1½) CINEMA
One or more of the following courses in French cinema may be taken; however, no more than 1½ units of 489 and 488 combined may be counted toward a General program in French, nor may more than 3 units of 489 and 488 combined be counted toward a Major or Honours degree in French. Evaluation will include written assignments, class participation and a final written examination. (*Prerequisite:* 286 or 287 or a literature course at a similar level in another language or HA 295) (3-0)

489A History of French Cinema
The course will cover the period from the start of the "talkies" to contemporary cinema, and will present various methods of analysing films. Seven or eight films from France will be studied. S(3-0)

489B Quebec Cinema
The beginnings of Quebec cinema; foremost directors; representative films; current tendencies. (Not open to students with credit in 481, 483, or 488J) NO

FREN 499 (1½) HONOURS GRADUATING ESSAY
During the final year of the Honours program, students will write a graduating essay in French of 7,500 to 10,000 words under the direction of a member of the Department, the topic to be approved by the Honours Committee. The essay must conform to acceptable standards of style and format and be submitted before the end of second term classes. An oral examination in French covering the topic of the essay will be held.
D.J. Turton Y

COURSES FOR TEACHERS

The courses in this section are open only to teachers who hold a British Columbia teaching certificate.

Summer French Immersion Program for Public School Teachers

Courses in the following group are available only as part of an off campus immersion program. Admission based on a placement test given on the first day.

FREN 133T (1½) INTRODUCTORY ORAL COURSE IN FRENCH (SUMMER IMMERSION PROGRAM)
A three week immersion course for beginners and near beginners using audio visual methods. Text: *De Vive voix* or *Dialogue Canada.* R(15-15-2)

FREN 233T (1½) INTERMEDIATE IMMERSION COURSE (SUMMER IMMERSION PROGRAM)
A three week immersion course for students who have a basic grounding in French. Both oral and written forms are studied, but with an emphasis on oral work. R(15-15-2)

FREN 333T (1½) ADVANCED IMMERSION COURSE (SUMMER IMMERSION PROGRAM)
A three week immersion course for students who have a good knowledge of French. Both oral and written forms are studied, but with an emphasis on oral work. R(15-15-2)

DEPARTMENT OF GEOGRAPHY

Michael C.R. Edgell, B.A. (Birm.), Conservation Dip. (Lond.), Ph.D. (Birm.), Associate Professor and Chair of the Department
Christopher R. Barnes, B.Sc. (Birm.), Ph.D. (Ott.), F.R.S.C. Professor
Charles N. Forward, B.A., M.A. (Brit. Col.), Ph.D. (Clark), Professor
Harold D. Foster, B.Sc., Ph.D. (Lond.), Professor
David Chuen-Yan Lai, B.A., M.A. (H.K.), Ph.D. (Lond.), Professor
Peter E. Murphy, B.Sc.Econ., Teachers Dip. (Lond.), M.A., Ph.D. (Ohio St.), Professor
J. Douglas Porteous, B.A., M.A. (Oxon.), Ph.D. (Hull), Professor
David F. Strong, B.Sc. (Mem.), M.Sc. (Lehigh), Ph.D. (Edin.), F.R.S.C. Professor
Philip Dearden, B.A. (Birm.), M.Sc. (Mem.), Ph.D. (U. of Vic.), Associate Professor
C. Peter Keller, B.A., (Dub.), M.A., Ph.D. (W.Ont.), Associate Professor
Stephen C. Lonergan, B.Sc. (Duke), M.A., Ph.D. (Penn.), Associate Professor

Lawrence D. McCann, B.A. (U. of Vic.), M.A., Ph.D. (Alta.), Associate Professor
Stanton E. Tuller, B.A. (Ore.), M.A. Ph.D. (Calif., L.A.), Associate Professor
Colin J.B. Wood, B.A. (Wales), M.A., Ph.D. (McM.), Associate Professor
David Duffus, B.Sc., M.Sc. (Regina), Ph.D. (U. of Vic.), Assistant Professor
Mark S. Flaherty, B.E.S. (Wat.), M.A. (Guelph), Ph.D. (McM.), Assistant Professor
K. Olaf Niemann, B.Sc. (Queen's), M.Sc., Ph.D. (Alta.), Assistant Professor
Eileen Van der Flier-Keller, B.A. (Dub.), Ph.D. (W. Ont.), Assistant Professor
Michael J. Whiticar, B.Sc. (Brit. Col.), Ph.D. (Christian Albrechts), Assistant Professor
Ian H. Norie, B.A., M.A. (U. of Vic.), Senior Academic Assistant and Administrative Officer
Gilian D. Sherwin, B.A. (Witwat.), Senior Laboratory Instructor
Richard Sykes, B.Sc. (U. of Vic.), Programmer
Philip M. Wakefield, B.Sc., M.A. (U. of Vic.), Senior Laboratory Instructor
June H. Whitmore, B.Sc. (Hull), Cooperative Education Coordinator

Visiting and Adjunct Appointments:

Brian Douglas Bornhold, B.Sc. (Wat.), M.A. (Duke), Ph.D. (M.I.T.), Adjunct Professor (1990-92)
Colin K. Campbell, M.A. (Brit. Col.), Ph.D. (Brist.), Adjunct Professor (1991-93)
Leslie T. Foster, B.Sc. (Lond.), M.A., Ph.D. (Tor.), Adjunct Professor (1991-93)
Robert Prescott-Allen, Adjunct Professor (1991-93)
Eugene D. Hetherington, M.A. (Tor.), Ph.D. (Brit. Col.), Adjunct Associate Professor (1990-92)
Mark W. Sondheim, B.A. (Antioch), M.A. (Tor.), Ph.D. (Brit. Col.), Adjunct Associate Professor (1990-92)
William R. Horne, B.A. (Guelph), B.Ed. (Tor.), M.A. (McM.), Ph.D. (Lanc.), Visiting Assistant Professor (1990-91)
William Osei, B.A. (Ghana), M.A. (Car.), Ph.D. (W. Ont.), Visiting Assistant Professor (1990-91)

GRADUATE PROGRAMS

For information on studies leading to the M.A. and Ph.D. degrees, see page 266.

LIMITATION OF ENROLLMENT

Students are advised that because of limited facilities and staff it may be necessary to limit enrollment in certain Geography courses.

GENERAL, MAJOR AND HONOURS PROGRAMS

The Geography Department offers courses leading to the B.A., B.Sc., M.A., M.Sc., and Ph.D. degrees, with a choice of General, Major, and Honours programs for both bachelor degrees. Attention of undergraduates is directed also to the possibility of combining a Major in Geography with a Minor in Earth Science or with a Major or Minor in Environmental Studies. Information about course combinations suited to specific professional objectives and about graduate programs is available from the Department.

Registration Requirements:

101A (ES101) and 101B are prerequisites to all other geography courses, except 102. In order to register for geography courses numbered 200 or above, students must obtain an average GPA of at least 4.50 in 101A and 101B combined. With the exception of 321, 322, 323, and 325, registration in upper division geography courses requires at least third year standing.

The 101A and 101B prerequisites may be waived by the Department in certain circumstances. Students should also note that 101A and 101B can be taken in any sequence or concurrently. In the event that a student who has had 101A/101B waived proceeds to a General, Major or Honours program in Geography, the student may be required to substitute 3 units of Geography courses as required by the Department.

Department Recommendations:

In general, the Department recommends appropriate first year mathematics or computer science courses, especially Computer Science 110 and 115, for the B.A. Major and Honours programs, and considers a second year mathematics course desirable for B.Sc. candidates. Geography Major and Honours students may take the required Geography 321 and one of 322, 323, or 325 in their second year.

Students who seek academic counselling are asked to come to the Department before or during the registration period.

Departmental Requirements for the B.A. General and Major in Geography:

General — 15 units: 101A and 101B; 3 units chosen from 201A, 201B, 203A, 203B, 205A, 205B; and 9 units of courses numbered 300 or above, 3 units of which selection must be a regional course.

Major — 24 units: 101A and 101B; 6 units of second year courses, which must include 201A or 201B, 203A or 203B, and 205A or 205B; 15 units of courses numbered above 300 which must include 321, at least one of 322, 323, or 325; and 3 units of regional courses.

Departmental Requirements for the B.Sc. General and Major in Geography:

General — 15 units: 101A and 101B; 3 units chosen from 201A, 201B, 203A, 203B, 205A, 205B; 321, and one of 322, 323 or 325; 1½ units chosen from 370, 372, 374, 376, 379; 4½ units chosen from other 300 or 400 level geography courses; and 3 units of mathematics or computer science.

NOTE: 3 units of regional geography courses are strongly recommended for both General and Major B.Sc. degrees.

Major — 24 units: 101A and 101B; 203A and 203B; 3 units chosen from 201A, 201B, 205A, 205B; 321; 3 units chosen from 322, 323, 325, 423, 427; 3 units chosen from 370, 372, 374, 376, 379, 471; 1½ units chosen from 422, 425, 426, 428; 6 units chosen from any other 300 or 400 level geography courses.

NOTE: 3 units of regional geography courses are strongly recommended as electives for both General and Major B.Sc. degrees.

All B.Sc. Major students are required to obtain:

(a) EOS 100 and EOS 101

(b) Three units of credit from Mathematics 100, 101, 102, 151

(c) One and one-half units of computer science other than Computer Science 100.

(d) An additional four and one half units from the following list or from 300 or 400 level courses that count toward B.Sc. major degrees in the outside disciplines listed below:

ASTR 120, 200A, 200B
BIOC 200, MICR 200
BIOL 150A, 150B, 200, 203, 204, 206, 207
3 units of 100 level Chemistry
C SC 100, 110, 112, 115, 200, 230, 250, 275, 340
ECON 201, 202
EOS 201, 202, 203, 204
MATH 100, 101, 102, 151, 200, 222, 233A, 233B, 233C, 240
STAT 250, 251
PHYS 100, 102, 110, 120, 125, 210, 214, 215, 216, 217, 220

Departmental Requirements for the B.A. and B.Sc. Honours in Geography:

33 units minimum: all of the 24 units of course requirements for the B.A. Major or the B.Sc. Major; 324, 499 and 4½ additional units in Geography or in other approved courses numbered above 300 chosen in consultation with the Department. At the end of the fourth year, the candidate will take an oral examination and submit an Honours Essay.

Students normally enter the Honours Program in their third year, having applied at the end of their second year. Requirements for entry into the Honours Program are: completion of two successful years at university (see "Faculty of Arts and Science — Honours Program" entry in this calendar) and a grade point average of at least 5.00 in all work for the second year (with 5.50 in Geography courses). A student wishing to enter the program in the fourth year (at the end of the third

year) must have a grade point average of at least 5.50 (with 6.00 in Geography courses) for work completed in the third year.

A grade point average of 5.50 (with 6.00 in Geography courses) must be achieved by an honours student to progress from third to fourth year in the Honours Program. Students who do not maintain this average will be required to transfer to a Major Program.

A First Class Honours degree requires a graduating average of at least 6.50; a grade point average of at least 7.00 in 300 and 400 level courses taken in the Department and at least B+ in 499.

A Second Class Honours degree requires a graduating average of at least 3.50; and a grade point average of at least 4.00 in 300 and 400 level courses taken in the Department and at least a B- in 499.

Honours students who do not meet the above requirements, but complete those for a Major in Geography, may opt to receive a Major degree. A student who opts for this and who has a graduating average of 6.50 or higher would receive a Major in Geography with First Class standing, while a student with a graduating average between 3.50 and 6.49 would receive a Major degree with Second Class standing.

Students should note the availability of Liberal Arts 306/307 (page 107) and Pacific Studies 200 (page 123) as electives in their senior years.

Note: Students registered in a B.A. or B.Sc. General in Geology as described in this calendar prior to 1991, may complete that option by substituting equivalent EOS courses (see page 67) for previous GEOL courses.

GEOGRAPHY COOPERATIVE EDUCATION PROGRAM

The Cooperative Education Program in the Faculty of Arts and Science is described on page 36. Additional general regulations pertaining to Cooperative Education Programs of the University of Victoria are found on page 32.

Entry into the Geography Cooperative Program is restricted to students who are enrolled in an Honours or Major program in Geography. Students will be admitted either at the end of their first year, or at the beginning or end of their second year. Deadlines for receipt of applications are September 15 or January 15. To enter and remain in the Geography Cooperative Program, students must maintain a B+ average in Geography and a B average overall. Students are also required to complete satisfactorily at least four work terms. A student may withdraw from the program and graduate with the normal Geography B.A. or B.Sc. degree.

Each work term is recorded on the student's offical transcript of academic record (as COM, N, or F). Details of work terms are recorded on the Record of Work Terms which is attached to the Academic Record.

Further information concerning the Geography Cooperative Program may be obtained from the Department.

UNDERGRADUATE COURSE INDEX

First Year 101A (1½), 101B (1½), 102 (1½)

Second Year 201A (1½), 201B (1½) Economic; 203A (1½), 203B (1½) Physical; 205A (1½), 205B (1½) Cultural

Third and Fourth Years

Techniques and Methods

321 (1½) Introduction toQuantitative Methods in Geography
322 (1½) Air Photo Interpretation
323 (1½) Introductory Cartography
324 (1½) Directions in Geography
325 (1½) Field Survey Techniques
422 (1½) Advanced Topics in Digital Remote Sensing
423 (1½) Advanced Cartography
425 (1½) Survey Methods and Analysis
426 (1½) Advanced QuantitativeMethods
427 (1½) Cartographic Production
428 (1½) Automated Cartography and Geographical Information Systems
490 (1½ or 3) Directed Studies
499 (3) Honours Seminar and Essay

Resources and Physical

350A (1½) Geography of Resource Management
350B (1½) Applied Resource Geography
370 (1½) Hydrology
371 (1½) Water Resources Management
372 (1½) Climatology
373 (1½) Applied Climatology
374 (1½) Biogeography
375 (1½) Forest Resource Management
376 (1½) Geomorphology
377 (1½) Applied Geomorphology
379 (1½) Pedology
450A (1½) Decision Making in Resources Management:Theory
450B (1½) Decision Making in Resources Management: Practical Applications
451 (1½) Advanced Water Resources Management
452 (1½) Coastal Resource Analysis
453 (1½) Marine Resource Analysis
454 (1½) Geographical Dimensions of Energy Policy
459A (1½) Recreation Resource Analysis: Concepts
459B (1½) Recreation Resource Analysis: Evaluation Planning and Management
471 (1½) Seminar in Physical Geography
472 (1½) Disaster Planning
473 (1½) Medical Geography

Regional

348 (1½) World Political Geography
361A (1½) Geography of Canada: Systematic Approach
361B (1½) Geography of Canada: Regional Approach
463A (1½) Geography of Mainland S.E. Asia
463B (1½) Geography of Insular S.E. Asia
464A (1½) Traditional China
464B (1½) Modern China
465 (3) Japan
466 (1½) Regional Studies

Urban, Economic and Cultural

340A (1½) Systems of Cities
340B (1½) Internal Structure of Cities
341 (1½) Industrial Geography
342 (1½) Urban Historical Geography
343 (1½) Regional Analysis
344 (1½) Urban SystemsSimulation
345 (1½) Geography and Planning of Tourism
347A (1½) Geography of Economic and Cultural Change: Developed World
347B (1½) Geography of Third World Development
378 (1½) EnvironmentalAesthetics
440 (1½) Urban Geography of Canada
441 (1½) Geography of Tourism Marketing
442 (1½) Geography of China-towns and Chinese Migration
443 (1½) Geography of Regional Development
444 (1½) Urban Transportation and Land Use Planning
445 (1½) Community Development and Planning in Canada
446 (1½) Development and Planning of the Urban Region
447 (1½) Urban Problems of Pacific Rim Developing Countries
448 (1½) Urban Social Geography and Planning

UNDERGRADUATE COURSES

INTRODUCTORY GEOGRAPHY

Students should consult the Department concerning courses offered in any particular year.

In certain courses students may be required to meet part of the expenses involved in required field trips, course supplies or the provision of course manuals. Students will be advised of such expenses during the first week of classes.

For courses carrying A or B designations, A is not a prerequisite of B unless indicated under the course description.

(Course offering codes: Y = Sept.-Apr., F = Sept.-Dec., S = Jan.-Apr., K = May-Aug., NO = Not offered this session) (The status of courses with no offering codes is uncertain.)

GEOG 101A (ES 101) (1½) SOCIETY AND THE PHYSICAL ENVIRONMENT

An integrated introductory description and analysis of the characteristics and interactions of the atmosphere, hydrosphere, lithosphere and biosphere. An introduction to the study of natural resources and contemporary problems in resource management.

P. Dearden, D. Duffus FS(2-2)

GEOG 101B (1½) THE HUMAN ENVIRONMENT

The processes of cultural change, migration and acculturation and their roles as determinants of changing cultural landscapes and regions. The origins of cities, the historical growth of cities, and the form and structure of the contemporary city. FS(2-2)

GEOG 102 (1½) CONTEMPORARY ISSUES IN CANADIAN REGIONS

A comprehensive geographic study of the macroregions of Canada, the Atlantic Provinces, Quebec, Ontario, the Prairie Provinces, British Columbia, and the Territories, will establish the background for a more detailed consideration of specific regional problems. These may include such problems as the drive for industrial diversification in the West, the development of energy sources in the Atlantic Provinces, the French-English conflicts in and around Quebec, and the native land claims in the Northwest Territories. Some issues may be local, such as the preservation of fruit growing land on the Niagara Peninsula of Ontario. (Open to students from any department. 101A and 101B are not prerequisites to this course. Not for credit toward major or honours degree programs in Geography, but may be taken for credit as an elective.) NO(3-0)

GEOG 201A (1½) LOCATION OF ECONOMIC ACTIVITIES

A systematic review of the major theoretical interpretations and analyses of the spatial characteristics of economies. Special attention will focus on population change; urban centres; agricultural, industrial, and service location; and spatial variation in growth. F(2-2)

GEOG 201B (1½) ECONOMIC GEOGRAPHY — PRIMARY ACTIVITY AND DIFFERENTIAL GROWTH

An examination of the role of primary industry in the world economy. Particular attention will be paid to the role of resource endowment as a determinant of standard of living. Strategies for growth and the impact of the energy sectors on national planning goals will be investigated. Agriculture, mining, transportation, and forestry will be discussed.

S. Lonergan S(2-2)

GEOG 203A (1½) PHYSICAL GEOGRAPHY I: HYDROSPHERE AND LITHOSPHERE

An introduction to the hydrosphere and lithosphere, including the processes involved in the development of landforms and that part of the hydrologic cycle involving surface and underground water.

H. Foster F(2-2)

GEOG 203B (1½) PHYSICAL GEOGRAPHY II: ATMOSPHERE AND BIOSPHERE

An introduction to the basic processes which determine the distribution patterns of climate, soil and living organisms. Included will be a discussion of radiation budgets, atmospheric moisture and circulation, soil forming processes and factors, and vegetation development and distribution. S(2-2)

GEOG 205A (1½) AN INTRODUCTION TO CULTURAL GEOGRAPHY

A study of the interaction between elements of culture, such as religion, language, architecture, agricultural systems, and the physical environment. The objectives of this course are to develop an awareness of multiculturalism in Canada and cultural diversity throughout the world, to promote insight into the tensions and conflicts that may arise from this diversity, and to further an understanding of the impact that culture has upon human societies and the built environment. F(2-2)

GEOG 205B (1½) SELECTED THEMES IN CULTURAL GEOGRAPHY

A detailed examination of themes in the field of cultural geography such as political geography, social and ethnic groups, population geography, and settlement patterns in selected regional settings.

C.-Y. Lai S(2-2)

TECHNIQUES AND METHODS

GEOG 321 (1½) INTRODUCTION TO QUANTITATIVE METHODS IN GEOGRAPHY

An introduction to statistical procedures and their application to geographical problems. The course will focus upon the basic statistical techniques, beginning with descriptive methods and concluding with correlation analysis. Students will have the opportunity to use this knowledge in empirical analysis of assigned class topics. (Open only to students pursuing a program in Geography or Environmental Studies) (See Credit Limit, page 15)

M. Flaherty FS(3-2)

GEOG 322 (1½) AIR PHOTO INTERPRETATION

An introduction to photogrammetry and interpretation of aerial photographs. Attention is focused on training in the use of air photos as source materials in map compilation and as tools for research in physical and social sciences. Among the topics studied are: principles and techniques of photo interpretation; inductive and deductive evaluation of air photo patterns; and remote sensing techniques. Laboratory assignments and field work will be emphasized. (*Prerequisite:* 203A or permission)

K.O. Niemann F(2-2)

GEOG 323 (1½) INTRODUCTORY CARTOGRAPHY

An introductory course in cartography and cartographic techniques; including spatial reference systems, map projections, techniques of terrain representation, cartographic symbolization of statistical data, and elementary data handling problems. Students will gain practical experience in designing and drafting maps.

C.P. Keller S(2-2)

GEOG 324 (1½) DIRECTIONS IN GEOGRAPHY

The course will briefly outline and discuss the historical development of geographical thinking and knowledge, but will concentrate mainly upon trends and controversies in geography in the 20th century. The course will enable students to relate their other courses to the multitude of facets that constitute the present discipline of geography. Areas covered will include: geography's relationships to other disciplines; the scope of geography; man's relationships to nature as a geographical theme; the ideographic versus nomethetic content of geography; practical application of geography; recent 'revolutions' in the discipline. (*Prerequisites:* six units of second year Geography courses, or permission of instructor).

D. Porteous S(3-0)

GEOG 325 (1½) FIELD SURVEY TECHNIQUES

An introduction to fundamental concepts of surveying and field work including the use of E.D.M., theodolites, transits, stadia level, plane table, chain and compass survey, and other techniques; activities include application of survey and sampling techniques to actual problems of measuring landform, hydrologic, or vegetation features, together with methods of analysis and evaluation. (Students will be charged a laboratory fee.)

I. Norie F(2-2)

GEOG 422 (1½) ADVANCED TOPICS IN DIGITAL REMOTE SENSING

This course deals with aspects of remote sensing including processing and classification of digital satellite and airborne data and digital elevation modelling. Emphases will be placed on the processes of interpretation of remotely sensed data, the enhancement of digital data for visual analysis and the integration of remotely sensed data with other spatial data. (*Prerequisites:* 321 and 322 or permission of the Department)

O. Niemann S(3-0)

GEOG 423 (1½) ADVANCED CARTOGRAPHY

The growth and evolution of cartography is traced from ancient civilizations to the present. Trends and tenchnological transitions in map production, reproduction, surveying, and navigation are emphasized. Contemporary topics in cartographic research and the industry of cartography are discussed. Assignments include independent research and participation in a group project. (*Prerequisite:* 321, 322, and 323, or permission of the Department) NO(2-2)

GEOG 425 (1½) SURVEY METHODS AND ANALYSIS IN GEOGRAPHY

This course will examine various approaches to research design and then focus on the statistical approach. The development of questionnaires and sample frames will be discussed, followed by preliminary analysis of the research data using nonparametric statistical techniques. (*Prerequisite:* 321, or permission of Department) S(3-0)

GEOG 426 (1½) ADVANCED QUANTITATIVE METHODS IN GEOGRAPHY

This course will introduce students to the more advanced statistical and quantitative techniques commonly used in geographical research. Particular emphasis will be placed on the role of the techniques in empirical and policy oriented research questions. Included in the course will be the multivariate statistical techniques of regression and factor analysis, as well as linear and simple location/allocation problems. (*Prerequisite:* 321 or 425, or permission of Department)

M. Flaherty S(3-0)

GEOG 427 (1½) CARTOGRAPHIC PRODUCTION

Map construction and reproduction techniques are emphasized in this course. Students are familiarized with darkroom procedures and common production methods such as inking, scribing, peel coating, color proofing systems, and screen tinting. (Open only to fourth year Geography major or honours students; enrollment limited to 15.) (*Prerequisite:* 323 or permission of the Department) NO(0-3)

GEOG 428 (1½) AUTOMATED CARTOGRAPHY AND GEOGRAPHICAL INFORMATION SYSTEMS

This course outlines the role of automation in cartographic design, production and reproduction. Hardware and software specific to cartography and geographical information systems (GIS) are introduced. GIS designs and applications are discussed in relation to spatial analysis and resource management. (*Prerequisites:* 321, 323, CSC 110 or 112 or 200, Math 100 or 102, or permission of the Department)

C.P. Keller FS(2-2)

GEOG 490 (1½ or 3) DIRECTED STUDIES IN GEOGRAPHY

In special cases, with the consent of the Department and the individual instructor concerned, a student may be permitted to pursue a course of directed studies. Courses of 1½ or 3 units may be arranged, but no student is permitted to take more than three units of directed studies. In order to qualify for a 490 course a student must have at least a 6.00 G.P.A. in the previous fifteen units of University work.

GEOG 499 (3) HONOURS SEMINAR AND ESSAY

it is recommended that honours students take the honours seminar in their third year. Honours students must register for the honours seminar and essay when admitted to the program. Students who register in their third year will receive a grade of INP until the essay is completed. The essay will be submitted at the end of the fourth year. (Grading: INP; letter grade)

D. Porteous Y(3-0)

URBAN, ECONOMIC AND CULTURAL

GEOG 340A (1½) SYSTEMS OF CITIES

An investigation of the evolution of urban systems in various parts of the world. Topics considered include the process of urbanization, urban growth and industrialization, the location of cities, urban size characteristics, functional specialization and spatial interactions within the systems. F(3-0)

GEOG 340B (formerly 349) (1½) INTERNAL STRUCTURE OF CITIES

This course explores the internal structure of major cities and the forces which create the city. Topics include the residential, commercial, and industrial structure of cities; problems of contemporary cities including housing and transportation; the planning of the urban environment. S(3-0)

GEOG 341 (1½) INDUSTRIAL GEOGRAPHY

An analytical examination of factors affecting location of manufacturing industries and the growth of manufacturing regions. Topics of discussions will include theories and models of industrial location; communist ideas of industrial location; measurement of industrial location and association; and consideration of industrial policies and planning in selected countries. (3-0)

GEOG 342 (formerly 449) (1½) URBAN HISTORICAL GEOGRAPHY

A comprehensive survey of the evolution of the city from its origins in the ancient world to its present form in the western world. The understanding of processes of growth and change is a major goal and this will be pursued generally in a chronological manner. The first half of the course will be concerned with urban origins, the classical city, the medieval city, and the mercantile and renaissance cities; and the second half with industrial age cities in Britain, United States and Canada, with emphasis on Canadian cities. (*Pre- or corequisites:* 340A and 340B or permission)

C. Forward F(3-0)

GEOG 343 (1½) REGIONAL ANALYSIS

An examination of socioeconomic systems from a spatial viewpoint. Major themes are spatial structures, shifts in location of activities, circulation systems, city/region relations, and regional economic development. A variety of conceptual models will be applied to the above topics. Assignments will involve outside reading and two or three short term projects. (*Prerequisites:* 3 units of 201A, 201B, 205A, or 205B, or permission) F(3-0)

GEOG 344 (1½) URBAN SYSTEMS SIMULATION

Gaming procedures which simulate real world urban processes form the core of this course. By adopting the roles of developers, politicians, planners, public interest groups or other decision makers, participants gain an understanding of the complex interrelationships and interactions occurring within an urban system. The following topics are stressed: urban transportation: land use development; zoning; urban/rural relationships; pollution; poverty; politics and municipal finance. Participants will be given the opportunity to redesign the gaming procedures and also to relate specific gaming situations to contemporary planning problems in Canadian cities. (Enrollment limited to 20; preference given to students in related urban courses.) (*Pre- or corequisites:* 340A and 340B or permission) NO(3-0)

GEOG 345 (1½) GEOGRAPHY AND PLANNING OF TOURISM

The course examines the growth of tourism, its effects on environment and life, and the challenge of planning and managing this large scale activity. Topics to be discussed include the elements of tourism, its spatial patterns and development in various parts of the world. The planning and management aspect will concentrate on such issues as its effects on towns, the countryside and coastal areas.

P. Murphy F(3-0)

GEOG 347A (formerly half of 347) (1½) GEOGRAPHY OF ECONOMIC AND CULTURAL CHANGE: DEVELOPED WORLD

A systematic treatment of factors effecting change, and a description and evaluation of their impact on cultural landscapes. Topics will include growth, innovation, diffusion, communications, migration and

urban/rural disparities. Attention will focus on the dynamics of change in the developed countries of Europe and North America.
C.J.B. Wood F(3-0)

GEOG 347B (formerly half of 347) (1½) A GEOGRAPHY OF THIRD WORLD DEVELOPMENT
Spatial aspects of the processes of modernization and development in Latin America, Africa, and Asia (excluding the U.S.S.R.). Colonial and postcolonial developments are discussed in terms of economic, social, and political geography, and resulting changes in both physical and cultural landscapes. (3-0)

GEOG 378 (1½) ENVIRONMENTAL AESTHETICS
This course derives from the traditional concern of both humanist and applied geographers with the appearance, meaning, and value of landscape. The nature of aesthetic satisfactions in natural, rural and built environments, varying in scale from a building to a region, are considered. Following discussion of current environmental aesthetic theory, the varying approaches of contemporary practitioners in humanistic and applied geography, architecture, and planning are investigated. Planning techniques for environmental aesthetic assessment are outlined, and the implications for managing environments are discussed. (NOTE: Students seeking a philosophical approach to aesthetics should consider PHIL 242.)
D. Porteous F(3-0)

GEOG 440 (1½) URBAN GEOGRAPHY OF CANADA
Part of the course is focused on a study of the complete urban system as an introduction to a separate consideration of the cities in each of the five major regions of Canada. In the discussion of the national system topics will include population characteristics, economic base, functional structure and urban images. The distinctiveness of regional city systems will be explored, including case studies of individual cities. Special topics covered may vary from one region to another, such as the clothing industry in Montreal or ethnic groups in Winnipeg. (*Prerequisites:* 340A and 340B or permission)
C. Forward S(3-0)

GEOG 441 (1½) GEOGRAPHY OF TOURISM MARKETING
This course is designed to complement the destination focus of 345 by examining the spatial aspects of tourists' consumer behaviour and the industry's marketing strategies. The course focuses on the structure and process of mental mapping by tourists and on the segmentation marketing of the industry, examining the impact of consumer research and marketing on trip satisfaction, and the environmental integrity of the landscape. (*Prerequisite:* 345 or permission)
P. Murphy S(3-0)

GEOG 442 (PACI 442) (1½) GEOGRAPHY OF CHINATOWNS AND CHINESE MIGRATION
This seminar studies the urban overseas Chinese communities in the Pacific Rim countries. Major topics of discussion will include migration theory, concepts of culture conflict, assimilation and acculturation, urban ethnicity, home environment of Chinese emigrants, attitudes and policies of host society towards Chinese immigrants and imprints of Chinese culture on the urban landscape of the receiving country. Emphasis will be placed on the Chinese migration to Canada and the study of the urban problems of Canadian Chinatowns.
C.-Y. Lai F(3-0)

GEOG 443 (1½) GEOGRAPHY OF REGIONAL DEVELOPMENT
The course is designed to examine policies and problems associated with regional development. The course will evaluate the changing spatial relationships between the location of resources and population. This will involve discussion of the 1) geographical limits of various political jurisdictions in federal states as opposed to unitary states and the powers vested in various levels of government to implement development plans and 2) problems of data availability on regional and subregional bases. Social and institutional obstacles to change will be discussed. Regional policies in Canada and the countries of Western Europe will be discussed and evaluated. (*Prerequisites:* 343 and ECON 201 and 202, or permission)
C.J.B. Wood S(3-0)

GEOG 444 (1½) URBAN TRANSPORTATION AND LAND USE PLANNING
The problem of developing a satisfactory transportation system relative to the areal pattern of land use in an urban area is the major concern of this course. The functions of the various modes of transport and their effectiveness in the urban environment are investigated. Land use types are studied as generators of traffic in the city. An attempt is made to determine the volume and nature of traffic generated by different land uses. Consideration is given to the possibilities of drastically altering land use patterns of cities, as well as changing transport systems. (*Prerequisites:* 340A and 340B or permission) (3-0)

GEOG 445 (formerly 346) (1½) COMMUNITY DEVELOPMENT AND PLANNING IN CANADA
The course is concerned with the development of communities in the Canadian urban system. It examines the planning problems and administration issues that have evolved in Canada's wide range of communities and cultures. The focus is on the manner in which spatial and technological developments have influenced the social and environmental balance of present communities. (*Prerequisites:* 340A and 340B or permission)
P. Murphy S(3-0)

GEOG 446 (1½) DEVELOPMENT AND PLANNING OF THE URBAN REGION
The course examines the linkages that exist between current urban geography analysis and the planning problems of the metropolitan regions of the North American continent. The course attempts to demonstrate the contribution geography may make, as a social science, to the overall planning and development of such city regions. The aspects of the urban environment selected for study include such topics as migration and housing patterns, industrial and transportation considerations, and the influence of central government pressure and legislation. (*Prerequisites:* 340A and 340B or permission) (3-0)

GEOG 447 (PACI 447) (1½) URBAN PROBLEMS OF PACIFIC RIM DEVELOPING COUNTRIES
The course examines the fundamental differences in urban organization between developed and developing countries, and studies the political, cultural and socioeconomic conditions under which cities in Pacific Rim developing countries are growing. (*Prerequisites:* 340A and 340B or permission) NO(3-0)

GEOG 448 (1½) URBAN SOCIAL GEOGRAPHY AND PLANNING
A behavioural approach to the study of man-environment systems in an urban context. With bases in cultural geography and environmental psychology, the course will investigate the spatial dynamics of urban behaviour in western societies, with special reference to social interaction, and perceptions, attitudes and learning within the urban system. Students should become aware of the contemporary urban social problems which are involved in planning the metropolitan environment. (*Prerequisites:* 340A and 340B or permission) (3-0)

RESOURCES AND PHYSICAL

GEOG 350A (ES 316) (1½) GEOGRAPHY OF RESOURCE MANAGEMENT
An introduction to the geographic study of natural resources: their form, inherent characteristics, and external relations with the geography of the areas in which they are found. Attention will be paid to the way in which resources and their use contribute to the character of areas and the manner in which interrelated aspects of culture — technology, perception, economic and institutional elements — help determine the pattern of use and its areal variations. FS(3-0)

GEOG 350B (1½) APPLIED RESOURCE GEOGRAPHY
An analysis of contemporary problems and issues of resource management. Case studies will be used to examine such issues as common property exploitation, multiple use, area management and conflict resolution. Particular emphasis will be placed on North American examples. (*Prerequisite:* 350A or E.S. 316 or permission) S(3-0)

GEOG 370 (1½) HYDROLOGY
A study of hydrology, focusing on the various factors that influence the

distribution of water resources in time and space. Among the topics studied are: evaporation and transpiration; runoff and stream gauging; snow and ice surveying; flood prediction and droughts. A term project, generally involving field work, is required. This course provides the background in physical hydrology recommended for students registered for 371. (*Prerequisite:* 203A and 203B, or permission)
K.O. Niemann F(2-2)

GEOG 371 (1½) WATER RESOURCES MANAGEMENT
A study of water resources management in different parts of the world, examining the influence of various physical, economic, social, political, and technological factors. The alternative ways in which such problems as water scarcity, floods, and declining water quality are handled will be discussed. A number of major water development schemes will be examined in detail. Students will be expected to undertake a modest research project and report upon it. (*Prerequisite:* 370 or permission)
S(2-2)

GEOG 372 (1½) CLIMATOLOGY
An investigation of the physical processes that determine the variation in climate and weather from place to place around the world. Emphasis will be on the process of mutual interaction between the earth's surface and the atmosphere, and the role of differing surface types in creating the climate above them.
S. Tuller F(2-2)

GEOG 373 (1½) APPLIED CLIMATOLOGY
A study of the application of physical principles to practical problems in climatology and the reciprocal interaction between climate and man's activities. Discussion topics will include: urban effects on climate, air pollution, human bioclimatology, agricultural climatology, and methods of microclimatic modification.
S. Tuller S(2-2)

GEOG 374 (1½) BIOGEOGRAPHY
This course provides an analysis of the organization of biotic systems. *Origins, dispersals, evolution, and limiting physical, biotic and cultural* factors as they relate to present day distribution patterns and ecological relationships will be considered. Particular attention will be paid to: the nature of ecological relationships; the landscape patterns resulting from these relations; the dynamic character of ecosystems; the impact of man upon ecological processes and ecosystem character. (*Prerequisite:* 203B, or permission) F(2-2)

GEOG 375 (1½) FOREST RESOURCE MANAGEMENT
An examination of the geographical and ecological parameters of forest systems, and the relationships of these parameters to actual and potential resource use. Major emphasis will be placed on the coastal forest resources of British Columbia, and comparisons drawn with Europe and United States examples. Topics, to be covered in both class and field work, will include forests as functioning ecological and management units, historical development and current changes in management policy and possible trends in future resource policies. (*Prerequisite:* 374 or permission) S(2-2)

GEOG 376 (1½) GEOMORPHOLOGY
An investigation of the genesis and distribution of landforms. Emphasis will be placed upon techniques used in the measurement of those processes which are of prime importance in the evolution of glacial, periglacial, temperate and tropical landforms. Marine, karstic and volcanic landforms will also be studied. The course will involve outside readings, field trips, and participation in a group research project. (*Prerequisite:* 203A, or EOS 100A and 100B or permission)
K.O. Niemann F(2-2)

GEOG 377 (1½) APPLIED GEOMORPHOLOGY
A detailed examination of the social relevance of geomorphology, in which three areas receive emphasis. Terrain analysis involves the evaluation of landscapes for mineral resources, trafficability, urban and industrial site suitability and agricultural productivity potential. Terrain stability studies explore the problems involved in maintaining landscape equilibrium in the face of major engineering schemes and waste disposal. Special attention is also paid to risk from natural hazards, especially those of importance in western North America, such as earthquake, tsunamis, avalanches and volcanic eruptions. Outside readings, field trips and participation in a group research project are involved. (*Prerequisite:* 376 or permission)
H. Foster S(2-2)

GEOG 379 (1½) PEDOLOGY
An examination of soil genesis and distribution and of soil classification systems. Attention will focus on the interplay of biophysical factors and processes that influence soil development, on soil types and characteristics in different pedogenic regimes, and on selected aspects of soil management and conservation. The course will involve field work, basic laboratory analysis, and completion of a research project. (*Prerequisites:* 203A and 203B, or permission) (2-2)

GEOG 450A (1½) DECISION MAKING IN RESOURCES MANAGEMENT: THEORY
An advanced course in the geography of resources management and conservation. Its purposes are to determine the factors which appear to influence decision making in the resources field, and to examine the effects of different decisions upon the physical and human environments. It is devoted to a review of the various approaches to the analysis of resources management decisions and their applicability to a variety of situations. (*Prerequisite:* 350A (E.S. 316) and 350B, or permission)
C.J.B. Wood F(3-0)

GEOG 450B (1½) DECISION MAKING IN RESOURCES MANAGEMENT: PRACTICAL APPLICATIONS
This course deals with a number of case studies, drawn from different parts of the world, applying theories and techniques developed in 450A, and comparing the impacts on the physical and human landscape. (*Prerequisite:* 450A) S(3-0)

GEOG 451 (1½) ADVANCED WATER RESOURCES MANAGEMENT
An examination of the theory and practice of contemporary water resources management. While the major focus will be on experience in North America, illustrations will also be drawn from other parts of the world. *A primary interest will be in planning and policy making.* (*Prerequisite:* 371) (3-0)

GEOG 452 (1½) COASTAL RESOURCE ANALYSIS
The geographic study of the patterns, processes and problems involved in managing coastal zone resources. Emphasis will be placed on the coastal zone as a functional region, the jurisdictional aspects of management, the spatial processes apparent in the coastal zone and the origin of resource use problems. Consideration will be given to cases in coastal zone mangement from Canada, the United Kingdom and the United States, with particular focus on British Columbia. (*Prerequisite:* 350A (E.S. 316) and 350B, or permission of instructor) S(3-0)

GEOG 453 (1½) MARINE RESOURCE ANALYSIS
A geographic study of the territorial organization, use and management of marine resources. Topics to be investigated include the common property nature of the ocean areas, different concepts and principles of territorial organization of the sea, exploitation of ocean resources, potential uses of the ocean and frameworks for future management. (*Prerequisite:* 350A (E.S. 316) and 350B, or permission. BIOL 310 or 311 recommended) NO(3-0)

GEOG 454 (1½) GEOGRAPHICAL DIMENSIONS OF ENERGY POLICY
An analysis of contemporary problems and issues in energy policy development. Particular attention will be paid to global variations in energy availability and requirements; transportation patterns, and environmental concerns.
S. Lonergan F(3-0)

GEOG 459A (formerly half of 459) (1½) RECREATION RESOURCE ANALYSIS: CONCEPTS
Introduction to concepts underlying recreational activity such as motivations, satisfactions, participation and demand, and the use of concepts such as multiple use, commons resources, substitutability, conflict resolution, threshold determination and externalities in understanding and planning the management of recreation resources; specific case studies are examined with special emphasis on Canadian and British Columbian examples. (*Prerequisite:* 350A (E.S. 316) or permission) (3-0)

GEOG 459B (formerly half of 459) (1½) RECREATION RESOURCE ANALYSIS: EVALUATION, PLANNING AND MANAGEMENT
An examination of the evaluation, planning and management of protected areas at various scales and levels of use from high intensity day-use areas through to wilderness, tracing the evolution, current status and future directions of park systems; usually involves a three day field trip for which there will be some charge. (*Prerequisite:* 459A) (3-0)

GEOG 471 (1½) SEMINAR IN PHYSICAL GEOGRAPHY
The course offers the opportunity to undertake advanced work in biogeography, climatology, geomorphology and hydrology. One of these fields will be specified for the course each year. Emphasis is on learning through experience, and students will complete suitable research projects in close consultation with the faculty member. This course may be taken twice only and no more than once from the same professor. (NOTE: Credit may not be obtained for 471 and 470, 472, 474 or 476)

Topics:

471A Biogeography
(*Prerequisite:* 374 or 375 or permission) NO(3-0)

471B Climatology NO(3-0)

471C Geomorphology NO(3-0)

GEOG 472 (1½) DISASTER PLANNING
A detailed overview of disaster planning, including risk and comprehensive planning, microzonation, design safety, models for disaster prediction, warning systems, disaster plans, reconstruction, and trauma support. The course will involve lectures, seminars, and research projects.

H.D. Foster F(3-0)

GEOG 473 (1½) MEDICAL GEOGRAPHY
An introduction to the major research themes of medical geography, including the social and environmental contexts of disease, epidemiological data delivery systems, and health and the pollution syndrome. The course will involve lectures, seminars, and research projects.
H.D. Foster S(3-0)

REGIONAL

Pacific Studies 200: Cultural Contact and Social Change in the Pacific Region, is recommended for students intending to take 347B, 364, 365, 447, 463A and 463B, 464A and 464B, 465.

GEOG 348 (1½) WORLD POLITICAL GEOGRAPHY
This course examines the ways in which political power at the national and international levels is influenced by the geographical features of the areas in which it operates. Themes include: the geographer's contribution to geopolitics; military geography; propaganda cartography; and the environmental consequences of nuclear war.
D. Porteous S(3-0)

GEOG 361A (1½) GEOGRAPHY OF CANADA: I — EASTERN CANADA
The course begins with a systematic introduction to the geography of Canada in order to establish a national perspective. This is followed by more detailed study of the regional geography of the Atlantic Provinces, Quebec and Ontario. The other regions of Canada are studied in 361B and a concluding section on the whole of Canada in that course maintains the national perspective. (Not open to students with 361B prior to 1990-91)
C. Forward F(2-2)

GEOG 361B (1½) GEOGRAPHY OF CANADA: II — WESTERN AND NORTHERN CANADA
The regional geography of the northern territories, the Prairie Provinces and British Columbia are studied, followed by a concluding section on the geography of Canada. the goal of this section is to summarize the major themes of national significance identified and to maintain the national viewpoint established in 361A. (*Prerequisite:* 361A, or permission)
C. Forward S(2-2)

GEOG 463A (formerly half of 463) (1½) GEOGRAPHY OF MAINLAND SOUTHEAST ASIA
A systematic geography of the mainland countries of Southeast Asia examining the physical and cultural landscapes, regional variations, and problems associated with modernization and underdevelopment, such as settlement, land reform, urbanization and political geography.
M. Flaherty F(3-0)

GEOG 463B (formerly half of 463) (1½) GEOGRAPHY OF INSULAR SOUTHEAST ASIA
A systematic geography of the island countries of Southeast Asia examining the physical and cultural landscapes, regional variation and problems associated with modernization, and underdevelopment. Topics will include settlement, land reform, urbanization, and political geography. NO(3-0)

GEOG 464A (formerly 364) (1½) GEOGRAPHY OF TRADITIONAL CHINA
A study of the physical environment of China and the role of the Chinese people in moulding and changing the landscape over the past four thousand years. The subject matter will deal primarily with conditions pertaining to the Chinese earth and the Chinese people in the period up to 1949, and provide an essential basis for appreciation of the transformation of China since 1949.
C.-Y. Lai F(3-0)

GEOG 464B (formerly 365) (1½) GEOGRAPHY OF MODERN CHINA
A study of the transformation of the Chinese landscape since 1949. Emphasis will be placed on the study of the resource base in different economic regions and the impact of the modern, state-directed economy upon settlement, agriculture, transportation and industrial growth. (*Prerequisite:* 464A or permission)
C.-Y. Lai S(3-0)

GEOG 465 (3) GEOGRAPHY OF JAPAN
A survey of the physical environment, cultural patterns and economy of Japan, which is intended to provide the background which will enable the student to assess Japan's role in the world today. Both traditional patterns and present day changes will be discussed.
S.E. Tuller Y(3-0)

GEOG 466 (1½) REGIONAL STUDIES
A study of the geography of a selected region of the world from a systematic perspective. Topics include the physical and human landscape; settlement; economic, political, and social geography; spatial variation in modernization and economic growth. Students are advised to consult the Department for an outline of the regions covered in any year. (May be taken more than once in different topics with permission of the Department) (3-0)

LIBERAL STUDIES

The University of Victoria, in cooperation with Malaspina College, offers a Bachelor of Arts degree in Liberal Studies at Malaspina College. The program, which is a full-time two-year program offered on the campus of Malaspina College at Nanaimo, B.C., is open to students who have completed two full years of university study. It consists of a multidisciplinary core program - an integrated format of lectures, seminars, tutorials and other activities equivalent to three courses, in each of the four terms - plus electives in traditional disciplines. The objective of Liberal Studies is to provide a sound general education as an alternative to programs based on one or two disciplines; the program aims

to provide a strong foundation in the basic intellectual skills and a broad background in the arts and sciences. For a full description of the program, information on admission, and other details, please see the Malaspina College Calendar.

FILM STUDIES

Although the University does not presently offer a major in film studies, there is a wide variety of courses taught on this campus dealing with the subject of film. Students interested in film and wishing to develop their knowledge of this subject may take some or all of the following courses: ENGL 405, 414, 415, FREN 483, GER 433, ITAL 485, RUSS 304, SPAN 485 (Faculty of Arts and Science); ED-B 463 (Faculty of Education); CW 312, HA 295, 363, 364, 365, 366, 367 (Faculty of Fine Arts).

DEPARTMENT OF GERMANIC STUDIES

Peter G. Liddell, M.A. (Edin.), Ph.D. (Brit. Col.), Associate Professor and Chair of the Department
Michael L. Hadley, C.D., B.A. (Brit. Col.), M.A. (Man.), Ph.D. (Queen's), Professor
Walter E. Riedel, B.Ed., M.A. (Alta.), Ph.D. (McG.), Professor
Rodney T.K. Symington, B.A. (Leeds), Ph.D. (McG.), Professor
Angelika F. Arend, Staatsexamen (Kö), M.A. (Car.), D. Phil. (Oxon.), Associate Professor
Johannes Maczewski, Staatsexamen (Marb.), Ph.D. (McG.), Assistant Professor

GENERAL, MAJOR AND HONOURS PROGRAMS

The Department provides three emphases in Germanic Studies which may be elected either independently or in concert:

1) German Language
2) German Literature and Cultural History
3) German Cultural Studies in English Translation

Students specializing in particular programs will find ample scope for complementing their German Studies in such recommended areas as English and Linguistics.

All students planning to take a concentration in a General program or Major or Honours in the Department must take 3 units of literature at the 200 level or higher in English or any language other than German.

Students wishing to take Third and Fourth Year courses to meet requirements for a B.A. degree in the General, Major or Honours program, must satisfy the Department that they have satisfactory standing in appropriate German courses at the 200 level or in German 149. Students wishing to enroll in the Honours Program will first obtain the approval of the Chair of the Department.

An Honours program in the Department normally requires a total of 63 units over a four year period, including graduating essay (see German 499). First and Second Class Honours degrees may be awarded. A First Class degree requires a first class graduating average and at least a B+ in German 499. A Second Class degree requires a second class graduating average and at least a C+ in German 499.

A student who fails to meet departmental requirements for First Class standing in the Honours program but has a first class graduating average will be offered the choice between Second Class Honours and a First Class Major degree. A student who fails to meet departmental requirements for Second Class standing but has a second class graduating average will be offered a Second Class Major degree.

The Department may give permission for individual studies and directed studies to be taken under course numbers 434 and 499 only. No other course numbers are offered as individual studies or directed readings at any time. German 499 is specifically intended for Honours students; German 434 may be taken for Major and Honours; as a general rule, both of these are available to students with a grade point average of at least 6.50 in German. German 434 would only be approved to be given in the Spring and Summer if such a student required the course in order to graduate that year.

PROGRAMS IN GERMAN

General — 100 or 140 (or equivalent); 200 and 204 (or equivalent); three units of literature at 200 level or higher in English or any language other than German; nine units of German courses chosen from 300 and those numbered 400 or above.

Major — 100 or 140 (or equivalent); 200 and 204 (or equivalent); three units of literature at 200 level or higher in English or any language other than German; 300, 420; ten and one half units of other German courses including at least *one* of 414, 418, 422.

Honours — 100 or 140 (or equivalent); 200 and 204 (or equivalent); three units of literature at 200 level or higher in English or any language other than German; 300, 420; at least *one* of 414, 418, 422; 499; at least twelve units of other German courses numbered 400 or above.

Students in the above programs may meet the requirements of 100 (140)-200 by completing 149.

Only three (3) units of 349(6) will be used in calculating the graduating G.P.A. and in satisfying the upper level program units.

COURSES

Native speakers may not obtain credit for 100 or 149. A native speaker is defined in this context as a person who has spoken German since childhood and who has received sufficient instruction in German to be literate in German. The Department will administer placement tests to assign students with previous knowledge to the appropriate level.

Students with secondary school credit in German, and students with transfer credit from other postsecondary institutions, will be placed at an appropriate level.

Intermediate and advanced students will be expected to have a standard bilingual dictionary. The Department recommends Langenscheidt's or Cassell's.

(Course offering codes: Y = Sept.-Apr., F = Sept.-Dec., S = Jan.-Apr., K = May-Aug., NO = Not offered, this session)

ELEMENTARY COURSES

GER 100 (3) BEGINNERS' GERMAN
This course is designed for students who have no previous knowledge of German and who wish to acquire a command of the spoken and written language in preparation for more advanced work. The language laboratory will reinforce the learning of basic speech patterns and idioms, and will complement the active use of German in the classroom.
J. Maczewski; W. Riedel Y(3-1)

GER 149 (6) INTENSIVE GERMAN
For students with no previous knowledge of German or insufficient knowledge to enter 200, this course is designed to cover a basic two year study of the German language in one year (equivalent to 100 plus 200) and to provide a rapid and thorough grounding in how to read, write and speak German, with emphasis on making practical use of the language as early as possible. In addition, readings of short texts will be introduced at an early stage and films and slides will be shown to illustrate aspects of German-speaking countries and to serve as topics for conversation practice. (*Prerequisite:* None. Students with credit for 100 or 140, or equivalent knowledge, may not take this course for credit. Students not making satisfactory progress will be advised to transfer to 100.) Text: To be announced
A. Arend; J. Maczewski Y(5-2)

INTERMEDIATE AND ADVANCED GERMAN

GER 200 (3) INTERMEDIATE GERMAN

This course aims at improving the student's practical mastery of the spoken and written language. Beginning at the level attained in first year German, its integrated approach to grammar review and contemporary texts focuses on the German speaking world. Classes consist of composition, translation and discussion. (Not open for credit to students who have credit for 149) (*Prerequisite:* 100)

M. Hadley; W. Riedel Y(3-1)

GER 204 (3) SURVEY OF GERMAN CULTURE AND INTRODUCTION TO GERMAN LITERATURE

A general survey of the German cultural heritage through readings, films, music and a study of literary selections from the Middle Ages to the present. (Not open to students who have credit for 240, 260, 201 or 202.) Texts: Frisch, *Biedermann und die Brandstifter,* Ryder/Mccormick, *Lebendige Literatur* and others to be announced (*Prerequisite:* 100 or 140 or equivalent; 200 is normally prerequisite to, or corequisite with, this course)

P. Liddell Y(3-1)

GER 300 (3) ADVANCED COMPOSITION: STYLISTICS AND TRANSLATION: I

The aims of this course are to develop the student's mastery of the German language by intensive practice in the use of idiom in oral and written composition, translation, and style analysis, and to improve oral fluency by means of conversation classes. (*Prerequisite:* 200 or equivalent) (Not open to students with credit in 349)

R.T.K. Symington Y(3-1)

GER 304 (3) A SURVEY OF GERMAN CULTURE (IN ENGLISH)

A survey of outstanding cultural trends against the background of Germany's past and present. Lectures will focus on traditional concepts of German culture, and major developments in religion, philosophy, folklore, literature, art, architecture and music in an attempt to give students a cultural perspective for viewing the German way of life. Other areas of discussion will include an assessment of current attitudes to Germany past and present. Representative texts will be read and discussed in English. (Knowledge of German is not required. May be chosen as an elective by students of German with Departmental permission) NO(3-0)

GER 310 (3) GERMAN LITERATURE IN ENGLISH TRANSLATION

A study of major authors from the 18th Century to the present day. (*Prerequisite:* First year English or equivalent. This course is intended as an elective for students in any faculty. Knowledge of German is not required. Open to Major and Honours students in German by permission, as an elective only) Texts: Goethe, *Faust;* Spender (ed.), *Great German Short Stories;* Büchner, *Danton's Death, Woyzeck;* Mann, *Tonio Kröger;* Kafka, *The Metamorphosis;* Hesse, *Steppenwolf;* Brecht, *The Life of Galileo;* Dürrenmatt, *The Visit;* Weiss, *Marat/Sade;* Grass, *Cat and Mouse.*

R.T.K. Syminton Y(3-0)

GER 349 (6) INTERMEDIATE INTENSIVE GERMAN

For students with first year German or equivalent knowledge, this course is designed to cover a two year study of the language in one year (equivalent to 200 plus 300). With the aim of achieving a high level of proficiency in reading, writing and speaking German, and of accelerating entry into the Department's 400 level courses, students will review grammar through intensive practice in composition, translation and oral presentations. Contemporary texts and other media (e.g. films) will be introduced at an early stage to develop skills in using and analysing idiomatic German. (*Prerequisite:* 100 or Departmental permission) (Not open to students with 149, 200, or 300. Only three (3) units of 349(6) will be used in calculating the graduating g.p.a. and in satisfying the upper level program units.) NO(5-2)

GER 390 (3) GERMAN READING COURSE

Rapid survey of grammar, reading of general and scientific articles, designed to meet the needs of students who have no knowledge of German, but want to gain reading comprehension in a special field. (Limited normally to students in third or fourth year or in graduate studies.) (Credit cannot be granted both for 100 or 140 and 390)

T.B.A. Y(3-0)

GER 400 (3) ADVANCED COMPOSITION, STYLISTICS AND TRANSLATION: II

A continuation and reinforcement of 300 through oral presentations composition, analysis of texts, translation, *Übersetzungskritik* and conversation based on selected texts, topics and the newspaper "Die Zeit". (*Prerequisite:* 300)

A. Arend Y(3-0)

GER 403 (1½) EVOLUTION OF THE GERMAN LANGUAGE

A survey of the evolution of German from the Dark Ages, through the religious and chivalric influences of the Middle Ages, to the impact of trade, technology and politics of today. The course will study the effects of developments such as: the printing press; Luther's Bible translation the influence of French and English; and the manipulation of German for propogandistic purposes (e.g., under National Socialist and Communist regimes). (*Prerequisite:* 200, LING 100, or permission of instructor)

P. Liddell S(3-0)

GER 405 (1½) THE NOVELLE

As the most "dramatic" of the shorter narrative forms, the *Novelle* gave rise in the 19th century to many attempts to define its characteristic form and its emphasis on intrigue, horror, love and the apparently inexplicable aspects of life. Against this background, representative *Novellen* from Goethe to the present day will be studied and compared to other short narrative prose forms, such as the *Märchen, Erzählung,* and *Kurzgeschichte.* NO(3-0)

GER 406 (1½) GERMAN DRAMA AND THEATRE

A study of the development of the German drama and its relationship to the German theatre from the 18th century (e.g. Lessing) to the present day (e.g. Brecht). Representative texts will be studied, with the aim of enabling the student to understand various dramatic forms.

J. Maczewski F(3-0)

GER 408 (1½) POETRY

German has long been considered an eminently poetic language because of its rich vocabulary, its flexbility in forming new combinations, its ability to express a wide range of emotion and thought through simple language, and its rhetorical strength. This course will introduce the student to a variety of poems from different periods and writers, and will permit students to choose a particular poet for special study. The primary concern of the course is teaching how to read German poetry for pleasure and understanding.

R.T.K. Symington F(3-0)

GER 411 (1½) MEDIEVAL GERMAN LITERATURE

An introduction to chivalric literature and civilization through the study of writers and their works, mainly from the first *Blütezeit* in German literature (1170-1250); early *Minnesang,* Walther von der Vogelweide, *Nibelungenlied,* Hartmann von Aue, Wolfram von Eschenbach, and others. The course will also provide a basic introduction to the Middle High German language through study of the original texts. NO(3-0)

GER 412 (1½) GERMAN LITERATURE AND CULTURE OF THE 17TH CENTURY

This course will focus on the literature of the Baroque period (ca 1600 to 1700). It will examine the social and cultural development of the German speaking areas of Europe, evaluating their contribution to 17th century culture within the European context. The emergence of truly individual and 'national' cultures will be shown by selected readings of poetry, drama, and prose. NO(3-0)

GER 414 (1½) ENLIGHTENMENT

Enlightenment was a 17th to 18th century European phenomenon of broad cultural significance whose central tenet was trust in the ability of human Reason to provide man with ultimate knowledge in all areas of endeavour. Literature in all its forms (essay, poetry, novel, drama) became the vehicle for a new optimism, which was encouraged by the view that man should "dare to know" all things. This course studies some of the major German contributions to rationalism by selectively examining such writers as Albrecht v. Haller, Lessing, Klopstock and Wieland.

M. Hadley F(3-0)

GER 416 (1½) LITERATURE OF THE STORM AND STRESS

A study of one of the briefest, yet most momentous revolutionary periods in the history of German literature (1770-1790) through reading, interpretation, and critical analysis of some of the early works of Goethe and Schiller and their contemporaries. NO(3-0)

GER 418 (1½) CLASSICISM

The literary period commonly described as German Classicism spans, in its broadest outlines, the years 1750-1810. More particularly, it describes that elevated classical idealism represented in the works of Goethe, Schiller and Hölderlin written between 1786 (Goethe's journey to Italy) and 1805 (Schiller's death). Against the background of classical antiquity, this course examines such major themes as the tragedy of the individual in political society, freedom and self determination, and the search for human values. NO(3-0)

GER 420 (1½) FAUST

Goethe's *Faust,* commonly regarded as the greatest single work in German literature, provides the student with a special challenge in its panoramic treatment of key themes found both in Germany's centuries-long literary tradition, and in the works of Goethe. Here questions concerning the nature of knowledge and morality, faith and reason, myth and reality are presented with both lyrical and symbolic breadth. Against the background of the Faust-myth and its traditions this course focuses on Goethe's achievement through detailed study of selected sections of Parts I and II of his work. NO(3-0)

GER 422 (1½) GERMAN ROMANTICISM

The beginnings and principal achievements of this movement coincided with the period of Classicism. As an Idealistic movement, however, it emphasized individual sentiments, ideas and moods, and fostered a renewed German national feeling. Starting from a well defined philosophical basis, writers explored in poetry and prose new realms of the imagination. This course is a study of Romantic myth, fantasy, fairytale, and ghost story. Some attention will be given to art and music.
M. Hadley S(3-0)

GER 424 (1½) 19TH CENTURY GERMAN AUTHORS

Emphasizing drama in Germany and Austria, the course examines the major changes in 19th century German literature against the background of the great social and political upheavals of the period. In surveying the work of writers from Kleist and Grillparzer, through Büchner, Heine and Hebbel, to Fontane and Hauptmann, the course will pursue such topics as the struggle for an ideal vision in an increasingly materialistic world; comedy and social drama; *Biedermeier* conversation and the young liberal writers; the effects of industrialization and of Darwin on literature; Realism as a reflection of, or refuge from, a harsher reality.
T.B.A. S(3-0)

GER 426 (1½) MODERN GERMAN LITERATURE: I

A study of German literature in the context of Germany's political and social transformation from about 1900 to World War I and the Weimar Republic. Representative literary texts from Naturalism will be examined with the thematic focus on the search for the "New Man."
NO(3-0)

GER 428 (1½) MODERN GERMAN LITERATURE: II

A study of selected literary works by such major writers as Kafka, Hesse, Thomas Mann, and Brecht against the background of changing social, political and intellectual conditions in Germany, from the Weimar Republic to the end of the Third Reich.
W. Riedel F(3-0)

GER 431 (1½) CONTEMPORARY GERMAN LITERATURE

A study of selected works of German, Austrian and Swiss writers since 1945. Within the context of political, social and cultural developments, selections from several authors will be studied. NO(3-0)

GER 432 (1½) LANGUAGE, LITERATURE AND THOUGHT OF EAST GERMANY

Since the creation of East Germany as the German Democratic Republic, it has established a distinctive literary and linguistic domain. This course will discuss and analyze major works of literature and other art forms created after 1949 in the light of socialist aesthetics from Marx to the present. Topics will include: Soviet Ideology and East German Culture; Politics and Art; Dissidents and Conformists; East German Literature and the West. NO(3-0)

GER 433 (1½) THE GERMAN NOVEL AND FILM (In English)

A study of selected major novels and their film adaptations. The novels will be examined as works of literature, as adaptations to film, and as social documents. Students of German will be encouraged to read passages in the original. NO(3-0)

GER 434A (1½) SPECIAL TOPICS

Designed for Major and Honours students, this course may be offered either as a reading course, a tutorial, or a seminar as warranted. Students wishing to register for this course must consult with the Chair. This course may be taken more than once in different topics, with permission of the Department. NO(3-0)

GER 434B (3) SPECIAL TOPICS

Designed for Major and Honours students, this course may be offered either as a reading course, a tutorial, or a seminar as warranted. Students wishing to register for this course must consult with the Chair. This course may be taken more than once in different topics, with permission of the Department. NO(3-0)

GER 444 (1½) GERMAN WOMEN WRITERS

This variable content course examines works by women writing in German. It deals with philosophical, sociopolitical and aesthetic issues in order to elucidate motives, goals and writing strategies in relation to their historical context. Course normally taught in English. Students of German will be encouraged to read texts in German.
A. Arend S(3-0)

GER 499 (3) HONOURS TUTORIAL AND GRADUATING ESSAY

This course will be conducted either as an individual tutorial or seminar as demand warrants. Its purpose is to help the student develop critical approaches to specialized materials at an advanced level, and to assist in preparation of a scholarly essay on an assigned topic. The essay must conform to acceptable standards of style and format, and be submitted before the end of second term classes. An oral examination covering the topic of the essay will normally be given. NO(3-0)

DEPARTMENT OF HISPANIC AND ITALIAN STUDIES

Lloyd H. Howard, B.A. (Brit. Col.), M.A., Ph.D. (Johns Hopkins), Associate Professor and Chair of the Department
Gregory P. Andrachuk, B.A., M.A., Ph.D. (Tor.), Associate Professor
Caroline Monahan, B.A., M.A. (Brit. Col.), Ph.D. (Lond.), Assistant Professor
Judith A. Payne, B.A. (Spalding), M.A. (U. of Louisville), Ph.D. (Penn. St.), Assistant Professor
Elena Rossi, B.A. (Vassar), M.A., Ph.D., (Tor.), Assistant Professor

Visiting and Adjunct Appointments:

Rosa Alvarado-Stewart, B.A. (Ohio Wesleyan), M.A. (Mich.), Visiting Lecturer (1990-91)
Dorothy J. Mennell, B.A., M.A. (Brit. Col.), A.M. (Stan.), Visiting Lecturer (1990-91)
Daniela Lorenzi, B.A. (U. of Vic.), Visiting Lecturer (1990-91)

GENERAL, MAJOR AND HONOURS PROGRAMS IN HISPANIC STUDIES

Students wishing to take courses in Hispanic Studies at the Third and Fourth Year levels are reminded that they must have the prerequisites of the first two years including 150 or 250, and 260. Exceptions may be made with the permission of the Department.

Students wishing to take Third and Fourth Year courses to meet

requirements for a B.A. degree on the General, Major or Honours Program, must satisfy the Department that they have satisfactory standing in 150 or 250, and 260. 250 should be taken in the Second Year (unless the student has credit in 150) and 350 in the Third Year. Students doing a General or Major in Hispanic Studies may take 260 in either the Second or Third Year.

Students wishing to enroll in the Honours Program must first obtain the approval of the Chair of the Department.

Students specializing in Hispanic Studies (including Honours), will find that they have sufficient electives to enable them to concentrate in a second field — for example, Italian or another language, Classics, English, History, Linguistics. A wise selection of courses is particularly important to those who may wish to enter graduate school, teaching, library work, government service, etc. The Department Chair will be happy to assist students with their selection of courses.

PROGRAMS IN HISPANIC STUDIES

General — First Year: 100 or 150*; Second Year: 250 and 260; Third and Fourth Years: 350 and six additional units of upper level Hispanic courses, selected with the approval of the Department.

Major — First Year: 100 or 150*; Second Year: 250 and 260; Third and Fourth Years: Spanish 350 and twelve additional units of upper level Hispanic courses, selected with the approval of the Department.

Honours — First Year: 100 or 150*; Second Year: 250 and 260; Third and Fourth Years: 350, 450, 499 and at least ten and one half units of upper level Hispanic courses selected with the approval of the Department.

*Students with credit in 150 must take 350 in their second year. Spanish courses offered in English may be credited to a General, Major or Honours Degree in Hispanic Studies, provided all coursework is written in Spanish.

GENERAL PROGRAM IN ITALIAN STUDIES

First Year: 100; Second Year: 200; Third and Fourth Years: 350 and 7½ additional units of upper level Italian courses. Up to 3 units may be substituted from the supporting course list below. Students wishing to combine an Italian Studies Minor with a Major or Honours program in the Faculty of Arts and Science or the Faculty of Fine Arts may not select a supporting course from that program.

SUPPORTING COURSE LIST:
CLAS 340 (3) Roman History
HA 341 (1½) Art and Architecture of the Italian Renaissance
HA 420 (1½) Special Studies in Medieval Art (With the approval of the Department only)
HA 442 (1½) The High Renaissance in Italy
HA 443 (1½) The Late Renaissance in Italy
HA 444 (1½) Venetian Painting
HA 445 (1½) Special Studies in Renaissance Art (With the approval of the Department only)

COURSES

Students should consult the Department concerning courses offered in a particular year.

(Course offering codes: Y = Sept.-Apr., F = Sept.-Dec., S = Jan.-Apr., K = May-Aug., NO = Not offered, this session)

Advice to Students who speak Spanish

Students who have spoken Spanish since childhood and who have received sufficient instruction in Spanish to be literate in Spanish may not obtain credit for 100, 150, 200 or 250. They will normally begin Hispanic Studies with 260 and/or 350. They may take 250 only with special permission.

Advice to students who speak Italian

Students who have spoken standard Italian since childhood and who have received sufficient instruction in Italian to be literate in Italian may not obtain credit for Italian 100 or 200. They make take any Italian course at the 300 or 400 level.

SPANISH

SPAN 100 (3) BEGINNERS' SPANISH
Emphasis will be placed on the acquisition of the basic skills of pronunciation, reading, writing and conversation. Attention will be paid to essential points of grammar. Y(3-1)

SPAN 150 (6) INTENSIVE SPANISH
For students with no previous knowledge of Spanish, or insufficient knowledge to enter 250. This course covers a basic two year study of the language and emphasizes the rapid acquisition of reading, writing and speaking skills. (*Prerequisite:* None) (Not open to students with credit in 100) NO(5-2)

SPAN 250 (formerly 290) (3) REVIEW OF GRAMMAR AND CONVERSATION
Intensive review of grammatical structures, concentrating on the acquisition of composition and translation skills; readings will be taken from significant Spanish and Spanish American authors; one hour a week will be devoted to conversation. (NOTE: Students who intend to do major or honours work in Hispanic Studies should take this course in the Second year. May also be taken as an elective) (Not open to students with credit in 150) Y(3-0-1)

SPAN 260 (3) INTRODUCTION TO THE LITERATURE OF SPAIN AND SPANISH AMERICA
A study of major authors of Spain and Spanish America in the genres of narrative, drama, and poetry. The student will be instructed in the techniques of literary criticism and discrimination. (For students who intend to do major or honours work in Hispanic Studies. May also be taken as an elective) Y(3-0)

SPAN 306 (1½) SPANISH CULTURE AND CIVILIZATION (IN ENGLISH)
An introduction to the artistic, intellectual, social and political history of Spain from pre-Roman times to the 20th century, using patterns and events to illustrate the evolution of Spanish attitudes and thought; specific reference will be made to Muslim Spain, the exploration and conquest of the New World, the loss of Spain's overseas empire, and the Civil War. (Knowledge of Spanish not required.) NO(3-0)

SPAN 307 (1½) LATIN AMERICAN CULTURE AND CIVILIZATION (In English)
An introduction to the artistic, intellectual, social and political history of Latin America from pre-Columbian times to the present; particular attention will be paid to the indigenous cultures, the exploration and conquest and the years which led to independence (1800-1825). Contemporary political trends will be analyzed, drawing examples from the situation in Central America, the Cuban Revolution, the dictatorships in Chile and Argentina, etc. Contemporary literary and intellectual trends will be viewed through such major figures as Gabriel García Márquez, Pablo Neruda, and Jorge Luis Borges. (Knowledge of Spanish not required.) S(3-0)

SPAN 350 (formerly 302) (3) ADVANCED COMPOSITION, TRANSLATION AND STYLISTICS: I
This course concentrates on advancing the student's communication skills. Emphasis will be placed on the mastery of spoken Spanish, translation, composition and readings. Y(3-0)

SPAN 450 (formerly 420) (3) ADVANCED COMPOSITION, TRANSLATION AND STYLISTICS: II
The goal of this course is to develop the student's mastery of Spanish by enhancing reading, writing and communication skills. Included will be intensive practice in composition and translation, together with an introduction to style analysis through discussion of selected texts. (*Prerequisite:* 302 or 350) Y(3-0)

SPAN 470A (formerly half of 406; 406A) (1½) EARLY MEDIEVAL LITERATURE (1100-1350)
A study of Spanish literature covering the turbulent formative period of Spain as a nation, beginning with the *Poema de mio Cid,* the epic of the warrior-hero, and ending with the ribald *Libro de buen amor,* by the Archpriest of Hita. F(3-0)

SPAN 470B (formerly half of 406; 406B) (1½) LATE MEDIEVAL LITERATURE (1350-1500)
A study of the major works of the late Middle Ages in Spain, dealing with aspects of Courtly Love, anti- and profeminism, and "immorality", beginning with the *Corbacho* by the Archpriest of Talavera, and ending with the story of the Spanish bawd, *La Celestina.* S(3-0)

SPAN 472 (formerly 402) (1½) CERVANTES' DON QUIXOTE
A study of *Don Quixote* in the context of Cervantes' life and times. NO(3-0)

SPAN 473 (1½) SPECIAL STUDIES IN GOLDEN AGE LITERATURE
Studies in the prose, poetry, drama and essay of the early and late Golden Age. The focus will be on representative authors, themes and genres not covered in 474A, 474B and 474C. Authors may include: Montemayor, Luis Vélez de Guevara, Francisco Delicado, Garcilaso de la Vega, Santa Teresa, San Juan de la Cruz, Góngora and Quevedo. (May be taken more than once depending on course content to a maximum of 3 units). (3-0)

SPAN 474A (formerly part of 413 and 474B) (1½) GOLDEN AGE DRAMA
A study of the development of Spanish drama from the advent of the commercial theatre in the mid-16th century to the end of the 17th century. Texts will be selected mainly from the works of Lope de Vega, Tirso de Molina and Calderón de la Barca. F(3-0)

SPAN 474C (1½) THE PICARESQUE NOVEL OF THE GOLDEN AGE
The inception and development of the picaresque novel in the 16th and 17th centuries, as represented by works such as *Lazarillo de Tormes* and *Guzmán de Alfarache.* NO(3-0)

SPAN 476A (formerly part of 476B, 410 and 400) (1½) SPANISH LITERATURE OF THE 19TH CENTURY
The development of the Romantic and Realist movements in Spanish drama, poetry and novel of the last century. Selected works of major authors such as Bécquer, Pardo Bazán, and Galdós will be studied in the context of the social and ideological climate of the period. NO(3-0)

SPAN 476C (formerly 401) (1½) THE GENERATION OF 1898
The ideological and aesthetic response of an important group of writers to the social and intellectual problems of turn of the century Spain; selected works of the major authors will be studied, with special emphasis on their fiction. NO(3-0)

SPAN 478A (formerly 411) (1½) THE 20TH CENTURY NOVEL AFTER THE CIVIL WAR
A study of the main currents of the modern novel in Spain, with special emphasis on individual responses to the Civil War of 1936-39 and on the development of the novel as a vehicle for social criticism. Recent trends will be examined in the light of the continuing search for new values. NO(3-0)

SPAN 478B (formerly 412) (1½) 20TH CENTURY DRAMA AND POETRY
A study of the drama and poetry of modern Spain, covering the works of such writers as Juan Ramón Jiménez, García Lorca, Pedro Salinas and Alfonso Sastre. NO(3-0)

SPAN 478C (1½) SPECIAL TOPICS IN MODERN SPANISH LITERATURE
Studies in the literature of modern Spain with special emphasis on the post-Franco period. Although primarily a study of fiction, some attention may be given to poetry and drama at the discretion of the instructor. (May be taken more than once depending on course content to a maximum of 3 units) NO(3-0)

SPAN 479 (ITAL 479) (1½) TOPICS IN HISPANIC AND ITALIAN LITERATURE
479A Women in the Hispanic and Italian World
A study of major women authors, characters and themes relevant to women's issues in Hispanic and Italian literature. (May be taken more than once to a maximum of 3 units depending on course content. May be given in English, Spanish or Italian) F(3-0)
479B Hispanic and Italian Literary Relations
A study of intercultural influences on the literatures of the Hispanic world and Italy. Topics will change from year to year. (May be taken more than once to a maximum of 3 units. May be given in English, Spanish or Italian) NO(3-0)

SPAN 480A (formerly 414) (1½) LITERATURE OF LATIN AMERICA (1492-1880)
A study of the literature and literary trends of Latin America from 1492 to c. 1880. Special emphasis will be placed on Romanticism and Realism. NO(3-0)

SPAN 480B (formerly 416) (1½) LATIN AMERICAN POETRY AND DRAMA SINCE 1880
A study of representative works in the genres of poetry and drama from 1880 to the present, with emphasis on writers of international stature such as Gabriela Mistral and Pablo Neruda. NO(3-0)

SPAN 480C (formerly half of 415) (1½) 20TH CENTURY LATIN AMERICAN FICTION: I
A study of representative novels and short stories of prominent authors. Emphasis will be given to fiction of the first half of the 20th century, including the "revolutionary" novel. NO(3-0)

SPAN 480D (formerly half of 415) (1½) 20TH CENTURY LATIN AMERICAN FICTION: II
A study of recent works by authors of international calibre such as García Márquez, Cortázar, and Fuentes. F(3-0)

SPAN 485 (1½) SPANISH FILM (In English)
An introduction to major accomplishments in Spanish-language film, from the experimental cinema of Bunuel to post-Franco director Almodóvar. Course content will vary to include recent trends in Mexico, Argentina, Cuba and other Latin American countries. (May be taken more than once depending on course content to a maximum of 3 units) NO(3-0)

SPAN 490A (formerly 425) (1½) HISTORY OF THE SPANISH LANGUAGE
A study of the development of the Spanish language from its origins in Vulgar Latin to its stabilization in Cervantes' time. (*Prerequisite:* 150, 250 or 290) NO(3-0)

SPAN 490B (formerly 426) (1½) TRANSLATION THEORY AND PRACTICE
A review of basic linguistic and cultural patterns and the problems of translation: emphasis will be laid on the acquisition of practical experience in translating material drawn from a large variety of fields including advertising, business, literature, politics, law, social work and the sciences. NO(3-0)

SPAN 495 (formerly 430) (1½ or 3) DIRECTED READING COURSE
For Honours and Major students. This course may not be repeated for credit. NO

SPAN 499 (1½) HONOURS GRADUATING ESSAY
Honours students will write a graduating essay of 7,500 - 10,000 words, in Spanish and on an approved topic, under the direction of a member of the Department. The essay must conform to acceptable standards of style and format, and be submitted before the end of Second Term classes. An oral examination, in Spanish, covering the topic of the essay will normally be given. Y

ITALIAN

ITAL 100 (3) FIRST YEAR ITALIAN
Emphasis will be placed on the acquisition of the basic skills of pronunciation, reading, writing, and conversation. Attention will be paid to essential points of grammar. Y(3-1)

ITAL 200 (3) SECOND YEAR ITALIAN
A review of the fundamentals of the Italian language, designed to reinforce and develop the student's speaking skills, comprehension, and writing ability; there will be a particular focus on important finer points

of grammar and translation. Readings are taken from modern Italian authors. One hour a week will be entirely devoted to conversation. Y(3-0-1)

ITAL 350 (formerly 310) (1½) ADVANCED GRAMMAR AND TRANSLATION

Conducted entirely in Italian, this course is designed to increase oral proficiency, and to aid written expression through grammatical analysis, translation, and composition. (Not open to students with credit in 302) F(3-0)

ITAL 370 (1½) STUDIES IN ITALIAN LITERATURE

Not more than one of the following will be offered each year:
370B Selected Authors before the 20th Century (May be taken more than once depending on course content to a maximum of 3 units) NO(3-0)

370C (formerly 311) Selected Authors of the 20th Century (May be taken more than once depending on course content to a maximum of 3 units) S(3-0)

370D The Italian Drama NO(3-0)

ITAL 470 (formerly 403)(1½, formerly 3) DANTE'S DIVINE COMEDY (In English)

A study of all three parts of the *Divine Comedy:* the *Inferno,* the *Purgatorio,* and the *Paradiso,* and their relationship to Courtly Love, mythology, theology, and medieval thought in general. (*Prerequisite:* Second year standing) NO(3-0)

ITAL 472 (1½) PETRARCH AND BOCCACCIO (In English)

A study of Petrarch's *Canzoniere* and Boccaccio's *Decameron,* and their relationship to the changing world of the late Middle Ages and their anticipation of the Renaissance and Humanism. (*Prerequisite:* Second year standing) NO(3-0)

ITAL 479 (SPAN 479) (1½) TOPICS IN HISPANIC AND ITALIAN LITERATURE

479A Women in the Hispanic and Italian World
A study of major women authors, characters and themes relevant to women's issues in Hispanic and Italian literature. (May be taken more than once to a maximum of 3 units depending on course content. May be given in English, Spanish or Italian) F(3-0)

479B Hispanic and Italian Literary Relations
A study of intercultural influences on the literatures of the Hispanic world and Italy. Topics will change from year to year. (May be taken more than once to a maximum of 3 units. May be given in English, Spanish or Italian) NO(3-0)

ITAL 485 (1½) ITALIAN FILM (In English)

An introduction to major accomplishments in Italian film, from the start of the talkies during Fascist times to contemporary cinema with special emphasis on directors such as De Sica, Rossellini, Fellini and Wertmüller. (May be taken more than once depending on course content to a maximum of 3 units) NO(3-0)

DEPARTMENT OF HISTORY

Peter A. Baskerville, B.A. (Tor.), M.A., Ph.D. (Queen's), Associate Professor and Chair of the Department
Ralph C. Croizier, B.A. (Brit. Col.), M.A. (Wash.), Ph.D. (Calif., Berk.), Professor
Brian W. Dippie, B.A. (Alta.), M.A. (Wyo.), Ph.D. (Tex.), Professor
G.R. Ian MacPherson, B.A. (Assumption U. of Windsor), M.A., Ph.D. (W. Ont.), Professor
Angus G. McLaren, B.A. (Brit. Col.), M.A., Ph.D. (Harv.), Professor
Patricia E. Roy, B.A. (Brit. Col.), M.A. (Tor.), Ph.D. (Brit. Col.), Professor
Eric W. Sager, B.A., Ph.D. (Brit. Col.), Professor
E. Patricia Tsurumi, B.A. (Brit. Col.), A.M., Ph.D. (Harv.), Professor
Kenneth S. Coates, B.A. (Brit. Col.), M.A. (Man.), Ph.D. (Brit. Col.), Associate Professor
James E. Hendrickson, B.A. (Sask.), B.Ed. (Alta.), M.A., Ph.D. (Ore.), Associate Professor
John Money, B.A., M.A., Ph.D. (Cantab.), F.R.Hist.S., Associate Professor
Donald L. Senese, A.B., Ph.D. (Harv.), Associate Professor
Wesley T. Wooley, A.B. (Ill.), A.M., Ph.D. (Chic.), Associate Professor
David Wootton, B.A., M.A., Ph.D. (Cantab.), Lansdowne Chair in the Humanities and Associate Professor
Robert S. Alexander, B.A. (W. Ont.), M.A. (Tor.), Ph.D. (Cantab.), Assistant Professor
Gregory R. Blue, B.A. (St. Vincent de Paul), B. Phil. (U. Catholique Louvain), Ph.D. (Cantab.) Assistant Professor
M.L. (Mariel) Grant, B.A. (Trent), Ph.D. (Oxon.), Assistant Professor
Timothy S. Haskett, B.A., M.A., Ph.D. (Tor.), Assistant Professor
Robert J. McCue, B.A., B.Ed. (Alta.), M.A., Ph.D. (B.Y.U.), Assistant Professor
M. Michèle Mulchahey, B.A., B.A. (Rice), M.A. (Tor.), M.S.L. (Pontifical Inst.), Ph.D. (Tor.), Assistant Professor
Thomas J. Saunders, B.A. (York), M.A., Ph.D. (Tor.), Assistant Professor
Phyllis M. Senese, B.A. (Tor.), M.A. (Car.), Ph.D. (York), Assistant Professor
David Zimmerman, B.A. (Tor.), M.A., Ph.D. (New Br.), Assistant Professor

Visiting and Adjunct Appointments:
Reginald H. Roy, C.D., B.A., M.A. (Brit. Col.), Ph.D. (Wash.), F.R.Hist.S., Visiting Professor

GRADUATE PROGRAM

For information on studies leading to the M.A. degree, see page 269.

UNDERGRADUATE PROGRAMS

The Department offers undergraduate course work at two levels: introductory courses at the 100-200 level, open to first and second year students; and advanced courses at the 300-400 level, open to students in both third and fourth years. Students are strongly advised to complete introductory courses in a given area before undertaking advanced courses in the same area. Students may not enroll in introductory courses after completing an advanced course in the same area; students may not enroll concurrently in introductory and advanced courses in the same area without written permission from the instructor in the advanced course. Please note that enrollment in seminars is limited and that the consent of the instructor is required for registration. In some instances, seminars in the first term may be offered again in the second if there is sufficient demand.

All history courses require substantial written and reading assignments. Information about textbooks in all courses is available from the bookstore.

GENERAL

The General Program consists of any 9 units of history courses numbered 300 and above in the third and fourth years. Students entering the General Program should normally complete 6 units of introductory history courses in the first and second years.

MAJOR

To be admitted to the Major Program, a student should have a C average in 6 units of introductory history courses. In the third and fourth years, the student must take 15 units in history courses numbered 300 and above. Of these 15 units, a minimum of 6 and a maximum of 12 units should be selected from one area of interest. In addition, 9 units of nonhistory courses must be selected in consultation with the department adviser to Majors. Students interested in majoring in history are advised to consult the Majors Adviser in their first year if possible. Majors must have their third and fourth year programs approved by the

Majors Adviser.

For a Major in history, a maximum of 3 units taken from Classical Studies 330, 340, 480A and 480C may be accepted in lieu of a course in European history.

HONOURS

In the Honours Program, students have the opportunity to study history more independently and intensively than is normally possible in the Major and General Program. Through small seminars, directed readings, and individual instruction in writing and research, the Honours Program encourages students to think critically and to deepen their understanding of both the content and craft of history. While the primary intent of the Honours Program is to help any interested and talented student of history achieve an excellent education in the liberal arts, the Program should be especially useful for students contemplating graduate work in history or careers in high school teaching, journalism, law, library science, or government service.

The Honours Program consists of 30 units of course work normally taken during a student's third and fourth years of study. Honours students must complete, usually by the end of their third year, 480, Approaches to History, and 495, an honours tutorial requiring a research essay of 7,500-10,000 words. During their fourth year, students may take either 496, a second honours tutorial requiring a 7,500-10,000 word research essay, or 497, a course enabling students to expand their third year research essays into theses of 15,000-25,000 words.

As part of 496 and 497 an oral examination will be conducted by a committee composed of the faculty supervisor of the paper, the second reader of the paper and the departmental Honours Adviser. The examination will be open to other interested members of the department.

Also, Honours students must complete an additional nine units of history at the advanced level and twelve units of electives chosen in consultation with the Honours Adviser. Furthermore, students are required to demonstrate a reading knowledge of a language other than English by passing, with at least a C, a 200 level language course (French 180 is also acceptable) or by successfully writing and passing a special language examination administered by the Department of History.

Admission to the Honours Program requires a high second class standing in six units of history courses or seminars. Application for admission to the Honours Program should normally be made in the spring, during the student's second year, although a small number of third year applications may also be accepted.

Honours candidates are required to have their program of courses approved by the Honours Adviser. To avoid overspecialization, Honours students are encouraged to study more than one area of history and to choose several courses outside the Department of History. Candidates whose performance is unsatisfactory may be required to transfer from the Honours Program to the Major Program. Admission to the fourth year Honours Program is conditional upon satisfactory performance in the third year.

First and Second Class Honours degrees may be awarded. A First Class degree requires a first class graduating average and at least a 5.50 average in Honours courses (480, 495, 496 and 497). If an honours student has a first class graduating average but has averaged 2.50 to 5.49 in Honours courses, the student will be given the option of receiving Second Class Honours or a First Class Major. A Second Class degree requires a second class graduating average and at least a 2.50 average in Honours courses.

UNDERGRADUATE COURSES

NOTE: *A brochure will be available through the department office at the start of the advance registration period, and will include any changes in scheduling made after publication of the University Calendar, as well as additional information not available at that time.*

(Course offering codes: Y = Sept.-Apr., F = Sept.-Dec., S = Jan.-Apr., K = May-Aug., NO = Not offered, this session)

INTRODUCTORY COURSES

Students should consult the Department concerning courses offered in any particular year.

Please note — first year students may enroll in introductory courses at the 200 level.

HIST 105 (formerly 242) (3) INTRODUCTION TO 20TH CENTURY WORLD HISTORY
This is a broad interpretive survey of the major forces that have shaped the contemporary world from the end of World War I to the present. Particular emphasis is placed on the global spread of Western ideas and institutions, on the rise of the Third World, and on growing interdependence among nations. A lecture course with audio visual presentations and optional discussion sections. Y(3-0)

HIST 130 (formerly 230) (3) HISTORY OF CANADA
A survey of Canadian development from the beginning of the French regime to the present. This course is strongly recommended to students wishing to take advanced courses in Canadian history. Y(3-0)

HIST 205 (1½ or 3) INTRODUCTION TO HISTORY
An introduction to methods and approaches used by various schools of historical analysis in attempting to understand the nature of political, cultural, social, and economic history. Particular subject varies at the discretion of the instructor. (May not be taken more than once for credit)

NO(3-0)

HIST 210 (3) HISTORY OF THE UNITED STATES
A general survey of the history of the United States of America from the colonial period to the present. This course is strongly recommended to students wishing to take advanced courses in American History.
B. Dippie, T. Wooley Y(3-0)

HIST 220 (3) HISTORY OF ENGLAND
History 220 is designed as a course for those who wish some acquaintance with the broad sweep of British history since the Norman Conquest. It may be used as a terminal course, complete in itself, or it may be used as a preliminary to more intensive study. This course is strongly recommended to students wishing to take advanced courses in British history.
M. Grant Y(3-0)

HIST 234 (3) MAIN CURRENTS OF WESTERN THOUGHT
A survey of the most influential ideas and intellectual movements of western culture from their origins, in Greece and the Middle East, to recent times. Not open to students who have credit for History 400.
NO(3-0)

***HIST 236 (3) MEDIEVAL EUROPE**
A survey of the middle ages in western Europe from about A.D. 300 to 1500, tracing not only the general political, social, and economic history of the West, but also concurrent developments in art, learning, literature, and law. Specific issues to be considered include the rebirth of Empire under Charlemagne and the origins of feudal society; Byzantine culture and the rise of Islam; the twelfth century renaissance; medieval religious life and the spiritual authority; and the impact of the Black Death. This course is strongly recommended to students wishing to take advanced courses in medieval history.
T. Haskett, M. Mulchahey Y3-0)

*** HIST 240 (3) HISTORY OF MODERN EUROPE**
After providing a brief background in medieval institutions, this course surveys European history from the Renaissance to the mid 20th century. The lectures will focus on political, intellectual, cultural, and social aspects of European society and the modern state as it emerges in the contemporary world. Y(3-0)

HIST 250 (H A 250) (1½) MIDDLE EASTERN CIVILIZATION: THE ANCIENT WORLD
An introductory survey of the major historical developments and cultural achievements in the Ancient Near East and Egypt from the 4th millenium B.C. to the 7th century A.D. Particular emphasis will be given to the impact of political and social change on the evolution of civilizations. F(3-0)

HIST 251 (H A 251) (1½) MIDDLE EASTERN CIVILIZATION: ISLAM
An introductory survey of the major historical developments and cultural achievements in the Islamic Middle East from the 7th century A.D. to modern times. S(3-0)

HIST 253 (formerly half of 252) (PACI 253) (1½) INTRODUCTION TO CHINESE CIVILIZATION
The purpose of this course is to introduce the student to the traditional civilization of China. Though a survey of many thousands of years in so short a space in time must of necessity be selective, the course will consider topics in the political, social, intellectual, and economic history of the civilization. (This course is a prerequisite to 433A and 433B)
R. Croizier F(3-0)

HIST 254 (PACI 254) (1½) CHINA AND THE WEST
An introductory survey of modern Chinese history with particular emphasis on China's relations with the West. The period covered will be from the 17th century but most emphasis will be on the last 150 years. (This course is a prerequisite for all upper level courses in modern Chinese history.)
R. Croizier S(3-0)

HIST 255 (formerly half of 252) (PACI 255) (1½) INTRODUCTION TO JAPANESE CIVILIZATION BEFORE THE 19TH CENTURY
The purpose of this course is to introduce the student to the traditional civilization of Japan from earliest times to the end of the 18th century. Topics in political, social, intellectual, cultural and economic history will be considered. (This course is a prerequisite to 435.)
E.P. Tsurumi F(3-0)

HIST 256 (PACI 256) (1½) INTRODUCTION TO MODERN JAPAN
A survey of modern Japanese history from the 18th century to the present. After a review of the last century of "traditional Japan," the country's transformation to a modern state will be examined. The last section of the course will deal with the post 1945 period. (This course is a prerequisite for all upper level courses in modern Japanese history.)
E.P. Tsurumi S(3-0)

HIST 260 (1½) HISTORY OF SCIENCE
A general survey of some of the major achievements of Western science from antiquity to the present: Aristotle, Galileo, Darwin and Einstein will be among those thinkers whose work is examined. S(3-0)

* 236 and 240 are introductory courses to European history and as such are recommended to all Major and Honours candidates as well as to students who are not intending to specialize in history.

ADVANCED COURSES: AMERICAN

HIST 300 (3) COLONIAL NORTH AMERICA
The British American colonies from their founding to the disruption of the first British Empire, with emphasis on intellectual, social, and economic development. NO(3-0)

HIST 301 (3) THE UNITED STATES IN THE 19TH CENTURY
A study of the social, political, cultural, and economic development of the United States in the period from the framing of the Constitution to the Spanish-American War, with particular concentration on certain significant themes.
B. Dippie NO(3-0)

HIST 304 (3) THE UNITED STATES IN THE 20TH CENTURY
An intensive study of American political, economic, and social history from the late 19th century to the present. Various major themes will be examined: industrialization, the growth of corporate power, urbanization, racial and ethnic relations, cultural change, and liberal reform. Particular attention will be devoted to the economic, social, and cultural determinants of American political history.
T. Wooley Y(3-0)

HIST 308 (3) AMERICAN INTELLECTUAL HISTORY
A study of the evolution of American institutions and ideas. Emphasis will be given to selected aspects of the nation's cultural life.
NO(3-0)

HIST 310 (3) THE AMERICAN WEST
The frontier in American history, the Trans-Mississippi West with emphasis on the Far West.
B. Dippie Y(3-0)

HIST 315 (3) AMERICAN DIPLOMATIC HISTORY
A study of American foreign relations with emphasis on the 20th century and the history of American diplomatic thought.
T. Wooley NO(3-0)

HIST 318 (1½) TOPICS IN AMERICAN HISTORY
An intensive study of selected aspects of American history. Students are advised to consult the Department for an outline of the topics to be considered. (May be taken more than once in different topics with permission of the Chair of the Department.)

"Origins of the Cold War"
T. Wooley F(3-0)

"The American Experience in Viet Nam"
T. Wooley S(3-0)

HIST 319 (3) SEMINAR IN AMERICAN HISTORY
Selected topics in American history. Enrollment limited. Priority in registration given to Honours and Major students in history, but others may be admitted with consent of instructor. Students are advised to consult the Department about the topics to be considered. (May be taken more than once in different topics with permission of the Chair of the Department.)

"American Racial Thought"
B. Dippie Y(3-0)

BRITISH

HIST 321 (3) THE RISE AND FALL OF THE TUDOR STATE
An intensive study of Monarchy, Church and Society in England under the impact of renaissance ideas, religious reformation and price inflation, from the final phase of medieval monarchy in the late 15th century to the breakdown of the institutions and relationships of Tudor government prior to the outbreak of Civil War in 1643.
J. Money NO(3-0)

HIST 322 (3) THE ENGLISH REVOLUTION AND ITS SETTLEMENT, 1643-1715
The principal themes in the development and consequences of the "Great Rebellion" and the "Revolution of 1688." The course will consider interpretive problems raised by the political, social, and intellectual influence of these events in both British and European history. (Not open to students with credit for 323 (Britain, 1660-1815) prior to 1982-83)
J. Money Y(3-0)

HIST 323 (3) BRITAIN, 1714-1815
Britain from the accession of George I to Waterloo — an intensive study of the roots of political stability and of social change, and of the consequences of their interaction in Britain in the 18th century.
J. Money Y(3-0)

HIST 325 (3) BRITAIN, 1815-1914
Great Britain, industry and empire; an intensive study of British history during the 19th century.
M. Grant Y(3-0)

HIST 327 (3) 20TH CENTURY BRITAIN
An examination of the major themes in the history of 20th century Britain, such as the collapse of imperial power, the development of closer relations with the European continent, and the social, cultural, and political tensions created by an era of rapid change and economic decline. NO(3-0)

HIST 338 (1½) SEMINAR IN BRITISH HISTORY
Selected topics in British history. Enrollment limited. Priority in registration given to honours and major students in history, but others may be admitted with consent of the instructor. Students are advised to consult the Department about the topics to be considered. (May be taken more than once in different topics with permission of the Chair of the Department)

"History of the British Labour Party, 1900-1979"
M. Grant F(3-0)

"Expansion of the British Polity, 1560-1830"
J. Money S(3-0)

"Mass Media and British Politics and Society, 1896-1945"
M. Grant S(3-0)

CANADIAN

HIST 340 (3) NEW FRANCE
A study of the French regime in Canada from 1500 to 1763. Themes to be stressed include European imperialism, migration and land settlement, the colonial economy, Amerindian-European contact, social structures, political development, and the emergence of a distinct culture. (HIST 130 and a reading knowledge of French would be useful but are not required.)
P. Senese Y(3-0)

HIST 342 (3) BRITISH NORTH AMERICA, CONQUEST TO CONFEDERATION
A combination of lectures and seminars examining the development of the economy, society, and culture of the area comprising present day Ontario, Québec, and the Maritimes. Particular emphasis will be placed upon the emergence of distinct social and cultural entities in each of these areas. NO(3-0)

HIST 343 (3) CANADIAN LABOUR HISTORY
This course examines the working class experience and the development of organized labour movements in Canada, with particular emphasis on the 19th and 20th centuries. Topics include preindustrial working conditions, industrialization, labour organizations, the growth of trade unions, labour legislation, and labour politics. (*Prerequisite:* 130 or consent of the instructor)
E. Sager Y(3-0)

HIST 344 (3) POLITICAL HISTORY OF CANADA SINCE CONFEDERATION
A study of recurring themes and problems in Canadian history including national policies, French-English tensions, federal-provincial conflicts, and external relations. Attention will be given to the social and economic background of these problems as well as their political manifestations.
P. Roy Y(3-0)

HIST 345 (1½) TOPICS IN CANADIAN-AMERICAN RELATIONS
Selected topics in the economic, cultural, political, and diplomatic aspects of Canadian-American relations. (Students with credit for 358 should consult the instructor before enrolling in this course.)
NO(3-0)

HIST 346A (formerly half of 346) (1½) CANADIAN URBAN HISTORY
Examines Canadian urban development using two complementary approaches: a history of individual cities and a history of the process of urbanization. In analyzing these two general topics, some of the themes to be discussed will be: economic growth and metropolitan development; population growth and change; social and political organization; and spatial growth and the physical environment. The course will cover the period from 1608 to the present, but the emphasis normally will be on 20th century urban development.
L. McCann NO(3-0)

HIST 346B (formerly half of 346) (1½ or 3) SEMINAR IN CANADIAN URBAN HISTORY
Selected topics in Canadian Urban History, with an emphasis on historiography and methodology; enrollment limited. (*Prerequisite:* 346A or consent of the instructor)
L. McCann NO(3-0)

HIST 347 (3) BUSINESS AND SOCIETY IN PERSPECTIVE: THE CANADIAN EXPERIENCE, 1800-1970
This course examines the changing function of the entrepreneur within Canadian society. There will be particular emphasis on business relations with labour, consumers, and politicians; self perception within the business community; and the influence of British, American, and multinational corporations on the development of a Canadian entrepreneurial class. NO(3-0)

HIST 348 (3) SOCIAL AND INTELLECTUAL HISTORY OF CANADA
A thematic study of the major intellectual and social attitudes, values, assumptions, and expectations in 19th and 20th century Canada. Students will examine original works by Canadians in a number of disciplines including history, politics, the social sciences, literature and art.
NO(3-0)

HIST 349 (1½) EDUCATION AND CHILDHOOD IN CANADIAN HISTORY
This course examines the social, political, and ideological context of the development of educational systems in Canada. It emphasizes such topics as concepts of childhood, the interrelationships of school and society, and the nature of educational reform. NO(3-0)

HIST 350A (formerly half of 350) (1½) PRAIRIE HISTORY TO 1905
The early history of the Prairie region; with special emphasis on such topics as native societies before the arrival of Europeans, the fur trade societies established by the Hudson's Bay Company and the St. Lawrence merchants, the Selkirk and other early settlements, the Métis civilization, the establishment of Manitoba, the North West Rebellion, and the establishment of Saskatchewan and Alberta.
I. MacPherson F(3-0)

HIST 350B (formerly half of 350) (1½) PRAIRIE HISTORY SINCE 1905
Emergence of the Prairie region after the creation of Alberta and Saskatchewan with particular emphasis on the immigration boom, the growth of cities, the wheat economy, agrarian and labour radicalism, the impact of the World Wars, the third party tradition, recent resource development, and the role of the region in national political development.
I. MacPherson S(3-0)

HIST 350C (1½ or 3) RESEARCH SEMINAR IN PRAIRIE HISTORY
Selected topics in Prairie History; the historiography of the region and methods of research will receive special emphasis. (*Prerequisite:* 350 or 350A or 350B or written consent of the instructor) NO(3-0)

HIST 351 (3) QUEBEC
A history of the province of Quebec from 1763 to the present. Emphasis will be on the development of a unique society in Québec. (HIST 130 and a reading knowledge of French would be useful but are not required.) NO(3-0)

HIST 352 (1½) SEMINAR IN FRENCH CANADA
A study of selected problems in French Canadian history stressing patterns in intellectual, social and economic development, emphasizing the 19th and 20th centuries. This course will be taught as a seminar, and will be offered in alternate years only. (*Prerequisite:* HIST 130 and a reading knowledge of French, or written consent of the instructor) NO(3-0)

HIST 353 (1½ or 3) SEMINAR IN BRITISH COLUMBIAN HISTORY
Selected topics in British Columbian history. Enrollment limited. Priority in registration given to honours and major students in history, but others may be admitted with consent of the instructor. Students are advised to consult the Department about the topics to be considered. (May be taken more than once in different topics with permission of the Chair of the Department.)
"History of Indian Land Claims in British Columbia"
J.E. Hendrickson Y(3-0)

HIST 354A (1½) NORTHWEST AMERICA TO 1849
An overview of the early history and literature of the region west of the Rocky Mountains and north of California, prior to the establishment of the colony of Vancouver Island in 1849. After a brief survey of the prehistory of the area, lectures will focus upon the period following the Indians' discovery of white men along the coast in the 18th century, and the consequences to both races that flowed from that initial contact. Topics to be considered will include maritime and overland exploration, European rivalries and claims, the development of the maritime and overland fur trade, and Indian-white relations.
J.E. Hendrickson F(3-0)

HIST 354B (1½) BRITISH COLUMBIA, 1849-1900
A study of the foundations of modern British Columbia, beginning with the founding of the colony of Vancouver Island to the emergence of

provincial political parties about the end of the 19th century; topics to be considered will include the colonies of Vancouver Island and British Columbia, the gold rush, settlement patterns, the origins of institutional life, Indian policy and Indian-white relations, and early federal-provincial relations. (*Prerequisite:* 130 or 354A or consent of the instructor)
J.E. Hendrickson S(3-0)

HIST 355 (1½) BRITISH COLUMBIA SINCE 1885
The emphasis will be on social, economic, and political developments within the province. Written assignments will be required.
P.E. Roy F(3-0)

HIST 356 (3) CANADIAN CONSTITUTIONAL HISTORY
A study of the evolution of the Canadian Constitution from 1763 to the present. NO(3-0)

HIST 357A (1½) SEMINAR IN CANADIAN DEFENCE POLICY
A study of selected aspects of Canadian defence policy since 1867. Emphasis on the military policies and strategic role of Canada in the 20th century (Enrollment limited) (*Prerequisite:* 130 or consent of the instructor)
D. Zimmerman NO(3-0)

HIST 357B (1½) SEMINAR IN CANADIAN EXTERNAL POLICY
A study of selected aspects of Canadian external policy since 1867, with emphasis on Canada's position as a middle power. (Enrollment limited) (*Prerequisite:* 130 or consent of the instructor) NO(3-0)

HIST 358 (1½ or 3) TOPICS IN CANADIAN HISTORY
An intensive study of selected aspects of Canadian history. (Each of the following topics may be taken more than once with permission of the Chair of the Department.)

"Aboriginal Peoples of Vancouver Island"
K. Coates S(3-0)

HIST 358A (1½ or 3) WOMEN IN CANADA
A history of women in Canada from the era of New France to the present. (Not open to students with credit for this topic in 358) NO(3-0)

HIST 358B (1½) NORTHERN CANADA
An examination of themes in the development of the northern Canadian economy and society including the post World War two period. (Not open to students with credit for this topic in 358 or 359)
K. Coates F(3-0)

HIST 358C (1½) NATIVE-WHITE RELATIONS
An examination of the relationship between Canada's aboriginal population and European immigrants from first contact through to the constitutional and legal battles of the 1980s. (Not open to students with credit for this topic in 358 or 359)
K. Coates S(3-0)

HIST 358D (1½) RACISM AND ANTISEMITISM IN CANADA
An examination of the origins of racism and antisemitism in the Western world and their establishment and evolution in Canada. (Not open to students with credit for this topic in 358 or 359)
P. Senese F(3-0)

HIST 358E (1½) CANADIAN SCIENCE AND TECHNOLOGY
An examination of the history of Canadian science and technology from New France until the present.
D. Zimmerman S(3-0)

HIST 358F (1½) MARITIME LABOUR IN CANADA
This course examines the history of labour in marine industries in Canada, especially shipping, shipbuilding, fishing, fish processing, and sealing in the nineteenth and twentieth centuries on the Atlantic and Pacific coasts. Themes include history of work, technology, labour organization, and the social relations of production. Not open for students with credit in this topic as HIST 358 or HIST 359. NO(3-0)

HIST 359 (1½ or 3) SEMINAR IN CANADIAN HISTORY
Selected topics in Canadian history. (Enrollment limited. Priority in registration given to honours and major students in history, but others may be admitted with consent of instructor. Students are advised to consult the Department about the topics to be considered.) (May be taken more than once in different topics with permission of the Chair of the Department)
This Year: The History of Rural Societies - Canadian Perspectives
I. MacPherson S(3-0)

EUROPEAN

HIST 360 (1½) THE RENAISSANCE
A study of the conditions, ideas, and people involved in the intellectual quickening that ushered in the early modern period of European history.
R.J. McCue F(3-0)

HIST 361 (1½) THE REFORMATION
A history of the men, and the political and religious factors involved in the upheavals of the Protestant and Roman Catholic reformations.
R.J. McCue S(3-0)

HIST 362 (1½) EUROPE UNDER THE ANCIEN REGIME
Preindustrial Europe in the 17th and 18th centuries. A social and cultural history of Western Europe. Emphasis will be placed on sex roles, household and family structure, religious beliefs, economic relations, and attitudes towards crime, madness and poverty. (*Prerequisite:* None; 240 recommended) NO(3-0)

HIST 363 (1½) REVOLUTIONARY AND NAPOLEONIC EUROPE
A study of the French Revolution and its impact on Europe in the late 18th and early 19th centuries. (*Prerequisite:* None; 240 recommended)
R.S. Alexander F(3-0)

HIST 365A (1½) SOCIAL AND CULTURAL HISTORY OF MODERN EUROPE: 1770-1848
The early industrial society of 19th century Europe. An examination of the initial impact of the commercial and industrial revolutions on Europe in the first half of the 19th century with special attention being paid to the transformation of everyday life, the growth of cities, and the making of the working and middle classes. (*Prerequisite:* None; 240 recommended)
A.G. McLaren F(3-0)

HIST 365B (1½) SOCIAL, CULTURAL, AND POLITICAL HISTORY OF MODERN EUROPE: 1848-1914
The mature industrial society of late 19th century Europe. An examination of the full flowering of industrial society in the latter half of the 19th century with special attention being paid to the acceleration of economic development, the stabilization of urban life, the professionalization of culture, and the bureaucratization of business and government. (*Prerequisite:* None; 240 recommended)
A.G. McLaren S(3-0)

HIST 366 (1½) EUROPE BETWEEN TWO WORLD WARS
This course will examine the impact of the First World War on European society through its effect on the international order and the rise of totalitarian ideologies such as communism and fascism. (*Prerequisite:* None; 105 or 240 recommended) F(3-0)

HIST 367 (1½) THE SECOND WORLD WAR AND THE RECOVERY OF WESTERN EUROPE
An examination of the effects of the Second World War on Europe, and the recovery of the Western European states in the postwar period. (*Prerequisites:* None; 105 or 240 recommended)
R.S. Alexander S(3-0)

HIST 370 (1½) FRANCE FROM THE REVOLUTION TO THE THIRD REPUBLIC, 1789-1870
An examination of the principal themes in French history from 1789 to 1870 such as the revolutionary tradition and conservative responses, anticlericalism and Catholicism, Parisian culture and peasant backwardness, and the beginnings of French imperialism. (*Prerequisite:* None; 240 recommended)
R.S. Alexander F(3-0)

HIST 371 (1½) MODERN FRANCE, 1870-1945
An examination of the principal themes in French history from 1870 to 1945 such as the emergence of the 'stalemate' society, the clashes of Left and Right, the growth of the French Empire, and Franco-German conflict. (*Prerequisite:* None; 105 or 240 recommended)
R.S. Alexander S(3-0)

HIST 372 (1½) IMPERIAL GERMANY
An examination of the principal themes in German history between the formation of the united state in 1871 and the German revolution of 1918-1919. (*Prerequisite:* None; 240 recommended)
T.J. Saunders F(3-0)

HIST 373 (1½) WEIMAR AND NAZI GERMANY
An examination of the principal themes and developments in German history between the end of World War One and the collapse of the Third Reich in 1945. (*Prerequisite:* None; 105 or 240 recommended)
T.J. Saunders S(3-0)

HIST 374 (SLAV 374) (3) IMPERIAL RUSSIA, 1689-1917
A history of Russia from Peter the Great to the fall of the monarchy. The course traces the response of the Russian state and Russian society to changing national needs and the challenge of the West. Through reports and discussions, emphasis will be given to periods of rapid change.
D. Senese Y(3-0)

HIST 376 (SLAV 376) (1½) THE SOVIET UNION
A history of the U.S.S.R. from 1917 to the present. The course will analyze the forces that have moulded the policies of the Communist leadership and examine how these policies have affected the shape of Soviet society and the role of the Soviet Union in world affairs. NO(3-0)

HIST 380 (1½) PROBLEMS IN MEDIEVAL EUROPE
A detailed study of selected problems in the history of Medieval Europe. The specific topics to be considered will vary from year to year. (May be taken more than once in different topics with permission of the Chair of the Department) (*Prerequisite:* None; 236 recommended)
"Medieval Legal and Society History"
T. Haskett F(3-0)
"Medieval Intellectual History"
M. Mulchahey F(3-0)
"Manuscript Production in the Middle Ages"
T. Haskett and M. Mulchahey F(3-0)

HIST 382 (1½) THE SCIENTIFIC AND INTELLECTUAL REVOLUTION OF THE 17TH CENTURY
A survey of the rise of modern science and the new world view which resulted from its success. Among the thinkers to be considered will be Galileo, Francis Bacon, Descartes, Hobbes, Newton and Locke. These men and their ideas will be examined in the social and political context of their times. The course is historical in emphasis and does not undertake literary criticism or philosophical analysis.
P. Wood F(3-0)

HIST 383 (1½) THE ENLIGHTENMENT
The 18th century challenge to authority; the revolutionary implications of attempts to discover scientific laws in human behaviour. The thought of the French *philosophes* will be considered together with that of other influential thinkers such as Rousseau, Hume and Adam Smith. These thinkers and their ideas will be discussed in the social and political context of their times. The course is historical in emphasis and does not undertake literary criticism or philosophical analysis. NO(3-0)

HIST 384 (1½) THE 19TH CENTURY MIND
The Romantic reaction to the French Revolution, the role of ideologies such as liberalism, nationalism and socialism, and the impact of the theory of evolution. These movements and others will be explored in terms of their social and political background. The course is historical in emphasis and does not undertake literary criticism or philosophical analysis. NO(3-0)

HIST 385 (1½) THE CRISIS OF MODERN THOUGHT
A study of the role of irrationalism and relativism in the work of such thinkers as Nietzsche, Freud and Einstein. Existentialism, fascism, Keynesian economics and other responses to the cataclysmic changes of the twentieth century will also be considered in their social and political setting. The course is historical in emphasis and does not undertake literary criticism or philosophical analysis. NO(3-0)

HIST 388 (1½ or 3) TOPICS IN EUROPEAN HISTORY
An intensive study of selected aspects of European history. Students are advised to consult the Department for an outline of the topics to be considered. (May be taken more than once in different topics with permission of the Chair of the Department). Y(3-0)

HIST 389 (1½ or 3) SEMINAR IN EUROPEAN HISTORY
Selected topics in European history. (Enrollment limited. Priority in registration given to honours and major students in history, but others may be admitted with consent of instructor.) (Students are advised to consult the Department about the topics to be considered.) (May be taken more than once in different topics with permission of the Chair of the Department)
"The Greats in European History"
R. McCue F(3-0)
"Crime and Punishment: 1750-1900"
A. McLaren F(3-0)
"European Visions of Other Societies"
G. Blue F(3-0)
"From Persona to Person"
D. Wootton F(3-0)
"Cinema and European Society, 1900-1945"
T. Saunders S(3-0)
"The Making of the Modern World System"
G. Blue S(3-0)
"Persecution and Toleration in Early Modern Europe"
D. Wootton S(3-0)
"New Religions of the Enlightenment"
R. McCue S(3-0)

HIST 390 (3) WAR IN THE MODERN WORLD, 1755 TO THE PRESENT
A survey of European military history from the Seven Years' War to the present day. It covers the change from the limited warfare of the early 18th century to the unlimited warfare of the 20th century. Emphasis is placed on the causes of war, the impact of new inventions on tactics and strategy, and the social, political, and economic results of wars on society up to and including the atomic age.
D. Zimmerman Y(3-0)

HIST 392 (1½ or 3) SEMINAR IN THE HISTORY OF THE SECOND WORLD WAR
Selected topics in the history of the Second World War. Enrollment limited. Priority in registration given to Honours and Major students in history, but others may be admitted with the consent of instructor. Students are advised to consult with Department about topics to be considered. (May be taken more than once in different topics with permission of the Chair of the Department) NO(3-0)

HIST 393 (1½ or 3) HISTORICAL STUDY OF PEACE AND WAR
A lecture course on selected aspects of military history and peace studies. Topics to be considered may include war and society; naval history; science, technology, and war; and the history of pacifism. (*Prerequisite:* 6 units of History; 240 and/or 390 recommended)
NO(3-0)

HIST 394 (1½) SEMINAR IN PEACE AND WAR STUDIES
Selected topics in military and peace studies. Students will be encouraged to pursue their own research interests within the confines of course topics. Topics may include: philosophers of peace and war; the social history of war, or the first world war. May be taken more than once in different topics with permission of the Chair of the department. (*Prerequisite:* 9 units of History, including one of 390 or 393) F(3-0)

D. Zimmerman
"Evolution of Naval Warfare"

M. Hadley
"Philosophers of Peace and War"

HIST 395 (3) SCIENTIFIC CONSCIOUSNESS IN HISTORICAL PERSPECTIVE
A study of the "topography" of human consciousness as it has existed in the West from archaic times to the present; particular emphasis will be placed on the scientific consciousness of the modern era. Topics include the archaic tradition; the emergence of rationalism; the Scientific Revolution and its historical impact; and the current challenges being posed to the scientific world view. NO(3-0)

HIST 396 (1½ or 3) TOPICS IN THE HISTORY OF SCIENCE
An intensive study of selected topics in the history of science; students are advised to consult the Department for an outline of the topics to be considered. The course may be taken more than once in different topics with permission of the Chair of the Department. NO(3-0)

HIST 397 (1½) THE RISE OF DARWINIAN EVOLUTION, 1760 TO THE PRESENT
The history of Darwinian evolution and its emergence as the unifying principle in the biological sciences. The course will examine the social context in which Darwinism emerged, the specific content of the theory, its scientific and philosophical antecedents, and the challenges that have been posed to Darwinism in recent times. (Not open to students with credit in 396 in 1983-84, 1984-85) NO(3-0)

HIST 399 (3) THE HISTORY OF MENTALITIES
An analysis of a number of social phenomena and their structural relationships as they have existed in Western civilization from the Middle Ages to the present; topics to be studied include suicide, addiction, creativity, romantic love, heresy and revolution. NO(3-0)

ASIAN

HIST 433A (PACI 433A) (1½) ANCIENT CHINA
A study of the rise of Chinese civilization and Empire from the earliest times to approximately 200 A.D. Major themes will be the origins of Chinese civilization, the flowering of Chinese philosophy in the times of Confucius and Lao-tzu, the formation of a unified Empire, and the social foundations of the Imperial State. (*Prerequisite:* 253 or permission of the instructor) NO(3-0)

HIST 433B (PACI 433B) (1½) PRE-MODERN CHINA
The development of Chinese civilization from the fall of the Han Empire in the 3rd century A.D., through the reunification of China under the Tang, to the Manchu Conquest of China in 1644. Major attention will be given to the political and social dynamics of the Imperial State and to the cultural basis of Chinese civilization. (*Prerequisite:* 253 or permission of the instructor) NO(3-0)

HIST 434A (PACI 434A) (1½) MODERN CHINA
China's encounter with the modern West from the 17th century to the mid 20th century. Emphasis on the collapse of the traditional order and the search for new political, social, and cultural forms. (*Prerequisite:* 254 or permission of the instuctor)
R. Croizier F(3-0)

HIST 434B (PACI 434B) (1½) CHINESE COMMUNISM
The roots of Chinese Communism and the successful implementation of a peasant-based revolution. Mao Zedong's efforts to create a radically egalitarian society after 1949; the reactions against Maoism after 1976; and China's search for a new strategy of modernization. (*Prerequisite:* 254 or permission of the instructor)
G. Blue S(3-0)

HIST 435 (PACI 435) (1½) FEUDALISM IN JAPAN: THE WAY OF THE WARRIOR FROM THE 12TH TO THE 19TH CENTURY
A study of politics, economics, society and culture in medieval and Tokugawa Japan with emphasis upon the role of the samurai class. (*Prerequisite:* 255 or permission of the instructor)
E.P. Tsurumi F(3-0)

HIST 436A (PACI 436A) (1½) JAPAN'S MODERN TRANSFORMATION: FROM FEUDAL COUNTRY TO NATION-STATE
An examination of a rapidly changing Japan from the time of the "opening" of the country by the Western powers in the middle of the 19th century to the time of the Pacific War and its aftermath in the middle of the 20th century. The format requires student participation such as oral presentations, written papers, and class discussion throughout the course. (*Prerequisite:* 256)
E.P. Tsurumi NO(3-0)

HIST 436B (PACI 436B) (1½) 20TH CENTURY JAPAN
A study of modern Japanese society and culture in the 20th century. Special attention will be paid to the influences of Westernization and industrialization upon traditional modes of thought, work, everyday life and creative endeavours. Changes in family life in the cities and in the countryside will be examined. (*Prerequisite:* 256) NO(3-0)

HIST 437 (PACI 437) (1½) JAPANESE WOMEN FROM THE 6TH TO THE 20TH CENTURY
A study of the history of Japanese women from the time of the ancient communities, through the golden age of classical literature, different phases of Japanese feudalism, disruptions and continuities of the post-1868 nation. The format requires student participation such as oral presentations, written papers, and class discussion throughout the course. (Not open for credit to students who have studied this topic under HIST 438)
E.P. Tsurumi F(3-0)

HIST 438 (PACI 438) (1½ or 3) TOPICS IN EAST ASIAN HISTORY
An intensive study of selected aspects of East Asian history. (Students are advised to consult the Department for information regarding the subjects to be considered. May be taken for credit more than once in different topics with permission of the Chair of the Department.) (*Prerequisite:* Relevant course work and permission of the instructor) NO(3-0)

HIST 439 (PACI 439) (1½) SEMINAR IN EAST ASIAN HISTORY
Selected topics in East Asian history. (Enrollment limited. Priority in registration given to Honours and Major students in history, but others may be admitted with consent of instructor. Students are advised to consult the Department about the topics to be considered. May be taken more than once in different topics with permission of the Chair of the Department) (*Prerequisite:* Relevant course work and permission of the instructor)

"The 11th Century Japanese Court: Women's Diaries"
E.P. Tsurumi S(3-0)

COMPARATIVE STUDIES

HIST 462 (HA 462) (3) ART AND REVOLUTION
Examines the role of the artist (mainly through painting and graphics) in the major social and political revolutions of modern times. Emphasis on the French, Russian and Chinese revolutions but some consideration of political art in other revolutions and movements of social protest.
R. Croizier Y(3-0)

HIST 464 (1½) BRITISH COLUMBIA AND THE AMERICAN PACIFIC NORTHWEST
A comparative examination of some of the political, economic, and cultural developments representative of the history of British Columbia and the American Pacific Northwest. NO(3-0)

HIST 469 (1½) SEMINAR IN COMPARATIVE HISTORY
Selected topics in comparative history. This course will examine various themes within different historical contexts. Students are advised to consult the Department about the topics to be considered in any given year. (May be taken more than once, to a maximum of 6 units, with permission of the Chair of the Department)

"Comparative Decolonization in the Twentieth Century"
G. Blue F(3-0)

"Aboriginal-White Relations: A Global Perspective"
K. Coates

SPECIALIZED COURSES

HIST 480 (3) APPROACHES TO HISTORY
A seminar devoted to studying the history of history and the nature of history as an intellectual discipline.
D. Wootton Y(3-0)

HIST 481 (1½ or 3) MICRO HISTORY: THEORY AND PRACTICE FOR REGIONAL STUDIES
A research oriented seminar examining the dimensions, possibilities and limitations of regional/local studies. (Preference given to students with at least third year standing or approval of the Department) (Not open to students with credit for this topic in 358 or 359) NO(3-0)

HIST 482 (1½) HISTORIANS AND THE COMPUTER: THE THEORY AND TECHNIQUES OF QUANTITATIVE HISTORY
The course has two main goals: to help students understand and assess research based on quantitative analysis, and to help students gain firsthand experience in the use of computers for historical research. Students will carry out their own quantitative research project.
E. Sager F(3-0)

HIST 490 (1½ or 3) DIRECTED READING
Students wishing to pursue a course of directed reading should, together with a faculty member willing to supervise such a course, formulate a proposal describing both the content of the course and a suitable means of evaluating the student's work. The proposal must then receive the approval of the Chair of the Department. Students may take this course for a total of 6 units, but not more than 3 units in any given year.

HIST 495 (3) THIRD YEAR HONOURS TUTORIAL
Directed readings and research. Students will be required to write a research essay of 7,500-10,000 words under the direction of a member of the Department.

HIST 496 (3) FOURTH YEAR HONOURS TUTORIAL
Directed readings and research. Students will be required to write a research essay of 7,500-10,000 words under the direction of a member of the Department. After acceptance of the paper by the supervising faculty member the student will undergo an oral examination on the field covered in the paper.

HIST 497 (3) HONOURS THESIS
The preparation of an honours thesis from 15,000 to 25,000 words in length under the direction of a member of the Department. Normally, this thesis is an expansion of the student's research essay written for 495. After acceptance of the paper by the supervising faculty member, the student will undergo an oral examination on the field covered in the paper.

HUMANITIES DIPLOMA PROGRAM

G. Kim Blank, B.A. (S. Fraser), M.A. (Wales), Ph.D. (Southampton), Faculty Coordinator

The Diploma Program in the Humanities is designed primarily for mature students who wish to explore possibilities for study in the Humanities without committing themselves to a full degree program. Candidates must have sought and obtained admission to the University. Students may complete the program on a part time basis, but must complete successfully at least 18 units of course work over a period of two to six years. Diploma students, with the guidance and assistance of a Faculty Coordinator, will arrange a program of courses organized around a particular theme or period. Students may select courses from Faculties and Divisions other than the Humanities Division, but such selection will be subject to the permissions of the departments involved and to the approval of the Faculty Coordinator. In the first year of their program they must take HUMA 100, a credit seminar, and HUMA 010, a brief noncredit orientation seminar. To remain in the program and to graduate in the program, Diploma Candidates must maintain a grade point average of at least 4.00.

Credit obtained within the Humanities Diploma Program may be transferable to a regular degree program. However, such transferability of credit is always subject to the specific requirements of the degree program.

The program is administered jointly by the Division of Humanities and by the Division of University Extension and Community Relations. All inquiries concerning details and regulations of the program should be addressed to the Faculty Coordinator, Dr. Kim Blank, Department of English.

COURSES

HUMA 010 (0) DIPLOMA ORIENTATION SEMINAR
This seminar will be taken prior to or in conjunction with Humanities 100 by all students in the Diploma Program.

HUMA 100 (1½) AN INTRODUCTION TO HUMANITIES
An introduction to the various ways in which scholars from different disciplines in the Humanities interpret, analyze, and evaluate texts. (Restricted to students in the Humanities Diploma Program) S(3-0)

LIBERAL ARTS

COURSES

(Course offering codes: Y = Sept.-Apr., F = Sept.-Dec., S = Jan.-Apr., K = May-Aug., NO = Not offered, this session)

It is recommended that students take 306 before 307. First year students may enroll only with the permission of the instructor.

LA 306 (1½) IDEAS AND PERSPECTIVES IN WESTERN CIVILIZATION: I
A critical interdisciplinary inquiry into some seminal ideas of western civilization and some perennial questions human beings have raised about themselves, human relationships, the social order, nature, God, and human destiny. Representative works will be drawn from literature, art, religion, philosophy, history, and social theory, from the Hellenic age to the 17th century. Texts will be studied and discussed not only as indicative of the climate of opinion of their time but also as having significance for formulating a philosophy of life. Guest lecturers from other departments will contribute, and occasionally films or slides relevant to the cultural and historical context of a work will be shown. (There are no prerequisites for the course, except that first year students may enroll only with permission of the instructor.) Texts: Sophocles, *Antigone;* selections from: Plato, *Apology, Crito, Republic, Phaedo, Symposium;* Aristotle, *Ethics;* Vergil, *Aeneid; The Bible;* Dante, *The Divine Comedy;* Machiavelli, *The Prince;* and Pascal, *Pensées.*
NO(3-0)

LA 307 (1½) IDEAS AND PERSPECTIVES IN WESTERN CIVILIZATION: II
This course continues the inquiry of 306, using texts (including at least one scientific work) drawn from the 18th century to the present. Guest lecturers from other departments will contribute, and occasionally films or slides relevant to the cultural and historical context of a work will be shown. (306 is not a prerequisite for 307 though students are encouraged to follow both studies in sequence; and there are no other prerequisites, except that first year students may enroll only with permission of the instructor.) Texts: Pope, *An Essay on Man;* Goethe, *Faust* (selections); Marx, *The Economic and Philosophic Manuscripts of 1844* (selections); Darwin, *The Origin of Species* (selections); Dostoevsky, *The Grand*

Inquisitor (from *The Brothers Karamazov)*, Nietzsche, *Twilight of the Idols* and *The Gay Science* (selections); Freud, *Civilization and Its Discontents* (selections); Weber, *Politics as a Vocation* (selections); Sarte, *Existentialism is a Humanism;* Merleau-Ponty, *Sense and Non-Sense* (selections). NO(3-0)

DEPARTMENT OF LINGUISTICS

Joseph F. Kess, B.Sc. (Georgetown), M.A., Ph.D. (Hawaii), Professor and Chair of the Department
Geoffrey N. O'Grady, B.A. (Syd.), Ph.D. (Indiana), Professor
Barry F. Carlson, B.A., M.A. (Colo.), Ph.D. (Hawaii), Associate Professor
John H. Esling, B.A. (Northw.), M.A. (Mich.), Ph.D. (Edin.), Associate Professor
Thomas M. Hess, B.A. (Colo.), M.A., Ph.D. (Wash.), Associate Professor
Thomas E. Hukari, B.A. (Ore.), M.A., Ph.D. (Wash.), Associate Professor
James Arthurs, B.A. (Durh.), M.A. (U. of Vic.), Ph.D. (Brit. Col.), Assistant Professor
Barbara P. Harris, B.A. (Car.), M.A., Ph.D. (U. of Vic.), Assistant Professor
Leslie Saxon, B.A., M.A. (Tor.), Ph.D. (Calif., San Diego), Assistant Professor (1991-94)

Visiting and Adjunct Appointments:
Arthur C. Brett, B.S. (Kansas City), Ph.D. (Missouri), Adjunct Associate Professor (1990-92)
B. Craig Dickson, B.A., M.A. (U. of Vic.), Adjunct Assistant Professor (1990-92)
Stephen J. Eady, B.Sc. (Wat.), M.A. (Ott.), Ph.D. (Conn.), Adjunct Assistant Professor (1990-92)
Margaret B. Warbey, B.A. (Brit. Col.), M.A., Ph.D. (U. of Vic.), Adjunct Assistant Professor (1989-91)

GRADUATE PROGRAMS

For information on studies leading to the M.A. and Ph.D. degrees, see page 271.

GENERAL, MAJOR AND HONOURS PROGRAMS

PREREQUISITE

(a) Except by permission of the Department, first year students may not take courses numbered 300 or higher. Courses numbered 400 or higher require at least a third year standing or permission of the Department.
(b) Some knowledge of a language other than English is recommended.
(c) Three units of introductory courses from the following list are recommended for entry into other courses: 100A and B, 360, 361, and 362.
N.B. A student will not be given more than three units of credit from the group of introductory courses mentioned above, e.g., credit will not be awarded for both 100A and B, and 360.
(d) Except for 360, 361, 362, 370A, 388, all courses numbered 300 and above normally have a prerequisite of a previous course in linguistics or permission of the Department. This regulation does not apply to students in the program leading to the Diploma in Applied Linguistics.

B.A. in Linguistics

General — Students who begin the study of Linguistics as one of their fields in the General Program in their first or second year are advised to take 100A and 100B, and then at least nine units of upper level courses in Linguistics in their third and fourth years.

Students who begin the study of Linguistics as one of their fields in the General Program of their third and fourth years should take 360, 361, or 362 and at least six other units of upper level courses in Linguistics.

Major — The requirements for a Major in Linguistics are 230, 250, 251, 252, and 15 units of senior courses in Linguistics including 408 and at least 3 units from Linguistics 410A, 410B or 410C, 440, and 441.

Honours — Students who wish to take an Honours program in Linguistics begin the program in the third year with the permission of the Department. Honours students must: (a) achieve at least a B average in all Linguistics courses taken in each of the third and fourth years and maintain a second class average in all work of the third and fourth years; (b) present 21 units of upper level Linguistics courses including 410A and 410B or 410C, 440, 441 and 499.

Students who meet the above requirements will be recommended for Honours degrees as follows. Successful completion of all prescribed courses together with the following graduating average: First Class Honours, 6.50 or higher, and a letter grade of at least A- in Linguistics 499 (Honours Thesis); Second Class Honours, 3.50 to 6.49, and a letter grade of at least B in 499. All Honours students are required to submit their proposals for Honours thesis research at the beginning of their final year. An Honours student with a first class graduating average, but with a grade less than A- in 499, will be given the option of receiving a Second Class Honours or a First Class Major degree.

B.A. in Applied Linguistics (Emphasis on teaching English as a Second Language)

Major

First and Second Years

Required Courses: 230, 250, 251, 252; 4½ units of first and second year English courses including ENGL 115 or 215; PSYC 100. Six units in a second language of which three units should normally be at the second year level.

Third and Fourth Years

Fifteen units of required courses consisting of 370A, 374, 375, 376, 388 or 389, 408, 410A, 440; including 3 units selected from 370B, 373, 378, 386, 390, 392 or 393, 395 (15 units). 376 will normally be taken in the final year of study.

Corequisite Courses: Three units selected from upper level English or Creative Writing in consultation with the Department.

Recommended Electives: Three units selected from Education-B courses numbered 336, 342, 343, 349, 360, 361, 435, 436.

Honours

In addition to the requirements for the Major, the Honours student must present 410B or 410C, 441, and 499 for a total of 21 units of upper level Linguistics courses. The regulations regarding the required level of achievement and the class of Honours awarded are the same as those stated above for the B.A. in Linguistics.

Notes: 1. The B.A. degree in Applied Linguistics will prepare the individual for teaching English as a second language in many foreign countries and in Canadian programs existing outside the public school system.
2. The B.A. in Applied Linguistics does not qualify students to teach in the schools of British Columbia. Those who wish to be teachers in the British Columbia school system must either hold an Education degree or have successfully completed the professional program for graduates offered by Education faculties in the Province. (For particulars, see page 153.)

B.Sc. in Linguistics

Major

First and Second Years

Required Courses: 230, 250, 251, 252; either BIOL 150A and 150B or BIOL 207 and PE 141; MATH 100 and 101 (or 102 and 151 with permission of the Department); 3 units from PHYS 100, 102, 110, 120, 220; PSYC 100 and 201.

Recommended Electives: CSC 100, 110, 115; PE 241A and 241B (prerequisite 141); PHYS 214; PSYC 213, 215A or 215B, 340; course(s) in a second language.

Third and Fourth Years

Required Courses: 370A, 370B, 380, 381, 382, 383; three units

selected from 408, 410A, 410B or 410C, 440, 441, and three additional units of Linguistics courses numbered upwards of 300, selected from the following: 373, 386, 482, 483, 484, 485, and from the following not already selected: 408, 410A, 410B, 410C, 440, 441.

Corequisite Courses: PSYC 300A and 4½ units selected from PSYC 300B, 313, 315, 317A, 317B, 333A, 335 or 337, 413, 415, 436, 450.

Honours

In addition to the requirements for the Major, the Honours students must present all of 410A, 410B or 410C, 440, 441 and 499 for a total of 21 units of upper level courses. The regulations regarding the required level of achievement and the class of Honours awarded are the same as those stated above for the B.A. in Linguistics.

Notes: 1. The B.Sc. in Linguistics is a suitable preparation for post-graduate study in the Speech and Hearing Sciences and for advanced studies in Psycholinguistics and the Phonetic Sciences.
2. A General program leading to a B.Sc. Degree is not available.

Diploma in Applied Linguistics (Emphasis on teaching English as a Second Language)

1. Applicants must have completed a University of Victoria Bachelor's degree or its equivalent including at least 6 units of courses in English and 6 units of second language courses.
2. Applicants whose previous instruction was given in a language other than English will normally be required to have a major in English.
3. The program may be completed within one year of full time study, but could also be taken part time. It must be completed within five years. For part time students, 376 will normally be taken in the final year of study.
4. A minimum of 15 units of course work in addition to those credited towards a degree is required to complete the program. Applicants who have received credit for some of these courses (or equivalent) previously will be allowed to substitute up to six units of courses recommended by the Department. Students whose degrees are from universities other than the University of Victoria must complete the entire 15 units at the University of Victoria. Students with a University of Victoria degree may negotiate to have transfer credit from other universities apply to the Diploma program.
5. Courses (15 units)
   a.) 250, 374, 375, 376, 388 or 389.
   b.) Six units from 370A; 370B or 373; 378; 386; 390 or 392; 395; or 7½ units including 360, 361, or 362.
   c.) One Education-B course: 331, 336, 342, 360, 435.
6. Those who intend to pursue an M.A. degree in Applied Linguistics should select 7½ units from section B, including 360, 361, or 362, which should be taken on entering the program, for a 16½ unit Diploma program.
7. Students who have completed the University of Victoria degree in Applied Linguistics or its equivalent may not register in the Diploma Program.
8. Those who wish to be teachers in the British Columbia school system must either hold an Education degree or have successfully completed the professional program for graduates offered by Education faculties in the province. (For particulars, see page 153).

UNDERGRADUATE COURSES

NOTE: The following courses are acceptable for either the B.A. or the B.Sc. degree; 230, 250, 251, 252, 370A, 370B, 373, 380, 381, 382, 383, 386, 408, 410A, 410B, 410C, 440, 441 482, 483, 484, and 485.

(Course offering codes: Y = Sept.-Apr., F = Sept.-Dec., S = Jan.-Apr., K = May-Aug., NO = Not offered, this session)

LING 099 (0) ENGLISH AS A SECOND LANGUAGE (6 fee units)
A noncredit course in English as a Second Language for students whose native language is not English — see pages 13 and 14 for regulations governing such students. Those who fail 099 in the first year must repeat the course in the second year. (Grading: Com, N, F)
TBA Y(3-0)

LING 100A (formerly half of 100) (1½) INTRODUCTION TO LINGUISTICS: I
An introduction to the subject matter of language and linguistics. Topics studied will include the nature of language through an overview of sound systems, word structures, writing systems, meaning and lexical sets, and sentence structure. (Knowledge of a language other than English not necessary) (Not open to students registered in or having credit in 360, 361, or 362)
Members of Department F(3-0)

LING 100B (formerly half of 100) (1½) INTRODUCTION TO LINGUISTICS: II
A more detailed examination of the topics covered in 100A as applied to the study of language in society, and language and mind. Ancillary topics include trade languages, languages of British Columbia, dialectology, language evolution, deaf communication, and language acquisition. (*Prerequisite:* 100A or the equivalent) (Not open to students with credit in 360, 361 or 362)
Members of Department S(3-0)

LING 230 (1½) INTRODUCTION TO LINGUISTIC TYPOLOGY
A cross-linguistic survey of syntactic and morphological structures, and current approaches to language universals and typology. (*Prerequisite:* None; 100A and 100B recommended)
T.M. Hess F(3-0)

LING 250 (1½) PHONETICS
An investigation of the production and nature of speech sounds commonly occurring in languages of the world. The course will provide practice in recognizing, transcribing and producing such sounds. Preliminary study of the ways in which sound systems are structured. (*Prerequisite:* None; 100A recommended)
G.N. O'Grady F(3-0)

LING 251 (1½) PHONOLOGY
The course deals with the overall organization and function of sound systems, with an investigation of their variety and of the universal features which unite them. (*Prerequisite:* 250 or permission of the Department) (Not open to students with 3 units of credit in 250)
G.N. O'Grady S(3-0)

LING 252 (formerly 210B; formerly half of 210) (1½) INTRODUCTION TO SYNTAX
An introduction to syntactic theory and analysis. Major syntactic structures of English will be analyzed from a linguistic perspective. Analogous constructions in other languages will be examined. Additional topics may include the lexicon, the interface between morphology and syntax, and the interface between syntax and semantics. This course is prerequisite to 410A. (*Prerequisite:* A previous course in Linguistics)
T.E. Hukari S(3-0)

LING 260 (JAPA 260) (1½) INTRODUCTION TO THE JAPANESE LANGUAGE AND LINGUISTICS
A general introduction to the synchronic and diachronic descriptions of Japanese; subjects covered may include: phonology, morphology, syntax, semantics, historical changes, poetics, dialectology, orthography, the sociolinguistic and psycholinguistic aspects of Japanese, the relationship between Japanese language, thought, and culture, and the history of Japanese linguistics. (Previous knowledge of Japanese not necessary)
H. Noro NO(3-0)

LING 261 (CHIN 261) (1½) INTRODUCTION TO THE CHINESE LANGUAGE AND LINGUISTICS
A general introduction to the synchronic and diachronic descriptions of Chinese. Subjects covered may include phonology, morphology, syntax, semantics, historical changes, poetics, dialectology, orthography, the sociolinguistic and psycholinguistic aspects of Chinese, the relationship between the Chinese language, thought, culture, and the history of Chinese linguistics.
H. Lin F(3-0)

LING 340 (SLAV 340) (1½) INTRODUCTION TO THE SLAVIC LANGUAGES (In English)
This course will acquaint students with the family of Slavic languages, their history and place within the Indo-European language family, and their present day structure. (*Prerequisite:* A previous course in Linguistics or permission of the Department) NO(3-0)

LING 341 (SLAV 341) (1½) SEMINAR IN A SLAVIC LANGUAGE: STRUCTURE AND HISTORY (In English)

Although designed as a continuation of 340 (SLAV 340), this course can be taken independently as well, and more than once for credit (in different languages) to a maximum of three units. This course will deal with the history and structure of a Slavic language not offered otherwise in the Department of Slavonic Studies. Depending upon demand, a different language will be treated in each given year. Languages offered at present are: Serbian, Polish, Ukrainian, Czech. (*Prerequisite:* A previous course in Linguistics or permission of the Department)

NO(3-0)

LING 360 (3) GENERAL LINGUISTICS

An introductory course intended for senior students with no previous training in the subject. The principal topics treated are phonology, morphology, and syntax in light of modern linguistic theory. (Credit will not be given for this course as well as for 100B, 361 or 362.)

J. Arthurs Y(3-0)

LING 361 (3) ANTHROPOLOGICAL LINGUISTICS

Language in relation to culture, semantics, and as an ethnographic tool. Intended for students with no previous knowledge of Linguistics. (Not open to students who have credit in or who are taking 100B, 360, or 362)

T.M. Hess Y(3-0)

LING 362 (3) INTRODUCTION TO GENERAL LINGUISTICS (In French)

An introductory course for senior students with attention focused on contemporary approaches to topics such as the production and interpretation of sounds in natural languages (phonetics and phonology), structure of words (morphology), phrase and sentence structure (syntax) and aspects of meaning (semantics). Additional topics will deal with social and historical aspects of languages and their use. (*Prerequisites:* none; a good knowledge of oral and written French is indispensable) (Credit will not be given for this course as well as for 100A, 100B, 360 or 361)

J. Arthurs Y(3-0)

LING 364 (PACI 364) (1½) LANGUAGES IN THE PACIFIC AREA

A survey of languages spoken on the islands of the Pacific Ocean (Indonesia, Philippines, Melanesia, Micronesia and Polynesia), their genetic relationships and area groupings; specific languages and families are selected for more detailed discussion, illustrating issues of relevance in linguistic theory and analysis, applied linguistics and sociolinguistics. (*Prerequisite:* None; 100B recommended) NO(3-0)

LING 365 (PACI 365) (1½) SEMINAR ON A PACIFIC AREA LANGUAGE: STRUCTURE, CONTEXT AND USAGE

This course deals each time with a different specific language spoken in Pacific Asia (except for Mandarin Chinese and Japanese) and on the Pacific Islands. Topics covered include phonological and grammatical structure, genetic relationships to others of its family, social and cultural context, political importance, use in the mass media and education, literature in the language, and the problems of language policy and planning. The language considered in a given term may be Korean, Tagalog, Chamorro, Palauan, Ainu, Tongan, Hawaiian, Samoan, Cantonese, Fijian, pidgin English and so on. May be repeated for credit up to a maximum of six units. (*Prerequisite:* 100B or 364 or PACI 364)

NO(3-0)

LING 370A (PSYC 370A) (formerly 370) (1½) PSYCHOLINGUISTICS

Offered in collaboration with the Department of Psychology. A course in the psychology of language covering such topics as the nature and function of language; the development of experimental psycholinguistics; the relationship of language and cognition; speech production and speech perception; comprehension and production of sentences, text, and conversational discourse; the structure of mental representations and the utilization of inference and semantic systems in processing natural language. The course may also cover nonverbal communication, bilingualism, and the relationship of language to sociocultural factors.

J.F. Kess F(3-0)

LING 370B (PSYC 370B) (formerly 369) (1½) DEVELOPMENTAL PSYCHOLINGUISTICS

Offered in collaboration with the Department of Psychology. The course examines the biological bases of language; the stage by stage acquisition of the phonology, morphology, syntax, and semantics of the child's first language; and the child's developing metalinguistic abilities. Also treated are the child's growing awareness of the form and function of speech acts, as well as the discourse rules governing conversations. (*Prerequisite:* 370A)

J.F. Kess S(3-0)

LING 372 (1½) NATIVE LANGUAGES OF BRITISH COLUMBIA

This course surveys the semantic, phonological and morphological and syntactic structure of languages belonging to five different language families of British Columbia, and discusses hypotheses of their history. (*Prerequisite:* A previous course in Linguistics)

T.M. Hess S(3-0)

LING 373 (1½) SECOND LANGUAGE ACQUISITION

The process of acquiring a second or additional language; examines the nature of learner grammars; individual differences in language acquisition; the role of input, and similarities and differences in L1 and L2 acquisition. Instructed acquisition and the relationship between acquisition research and second language teaching is also discussed. (*Prerequisite:* a previous course in Linguistics)

J.H. Esling S(3-0)

LING 374 (1½) APPLIED LINGUISTICS

Explores and demonstrates the relevance of theoretical linguistics, psycholinguistics, sociolinguistics and contrastive analysis to teaching and learning of language; introduction to approaches and methods in language teaching, curriculum development, error analysis, testing. (*Prerequisite:* A previous course in Linguistics or permission of the Department)

M. Warbey F(3-0)

LING 375 (1½) TECHNIQUES IN APPLIED LINGUISTICS

With special reference to teaching English as a second language, this course addresses problems such as course design, preparation and evaluation of pedagogical materials, selection of a curriculum, construction of a syllabus and lesson plans, classroom teaching techniques, and the use of audio-visual materials. Reassessment of the theoretical principles discussed in 374. (*Prerequisite:* 374 or permission of the Department)

M. Warbey S(3-0)

LING 376 (1½) SEMINAR AND PRACTICUM IN APPLIED LINGUISTICS

This course consists of a series of seminars dealing with teaching English as a second language methodology, observation of English as a second language classes, and participation by the students in English as a second language class instruction as arranged by the Department. Evaluation is based on one essay or report, a log covering observation of classes, participation in the seminars and classroom teaching, and on the successful completion of the student teaching practicum. (Normally taken in the final year. Open only to students registered in the Applied Linguistics programs. Students who are scheduled to complete the practicum during May-August will be given a grade of INP at the end of April.) (*Pre-or corequisite:* 374 and 375 which may be taken concurrently)

M. Warbey Y(1-2)

LING 378 (1½) CONTRASTIVE LINGUISTICS

An introduction to the contrastive study of languages with respect to their phonological, morphological, syntactic and semantic systems. Special attention is also given to factors related to language learning situations, with reference to transfer and interference from the mother tongue. The language selected to be compared with English will vary from year to year. (*Prerequisite:* A previous course in Linguistics) Texts: Selected readings on the theory of contrastive analysis.

J. Arthurs F(3-0)

LING 380 (1½) ACOUSTIC PHONETICS

A study of the acoustical properties of speech sounds including the basic

physical principles involved in the generation and propagation of sound energy and the phenomenon of resonance; students are introduced to experimental instruments and trained in the use of the sound spectrograph for the analysis of speech sounds. (*Prerequisites:* 250 or equivalent)
C. Dickson F(2-2)

LING 381 (1½) PHYSIOLOGY OF SPEECH PRODUCTION
A study of the physiology of the human speech mechanisms including the relevant aspects of the respiratory, laryngeal and supralaryngeal systems. (*Prerequisite:* 250)
J.H. Esling F(2-2)

LING 382 (1½) EXPERIMENTAL PHONETICS
This course expands on topics covered in Linguistics 380. Emphasis is placed on the design of phonetic and phonological experiments using electronic systems and introducing computer technology for speech analysis. (*Prerequisite:* 380)
C. Dickson S(2-2)

LING 383 (1½) AUDITORY PHONETICS
A study of the perception of speech sounds in terms of the physiology of the organs of hearing with attention being focused on the hearing mechanism as a transducer of acoustical energy to neural impulses. Students are also introduced to speech perception research methodology. (*Prerequisite:* 250 or 251, or equivalent)
J.H. Esling S(2-2)

LING 386 (1½) PROSODIC FEATURES OF ENGLISH
Detailed analysis of the stress and intonation patterns of English and their relationship to grammatical functions; phonetic descriptions of rhythm and voice quality are practised and used to analyze speech in various languages. (*Prerequisite:* 250, 251, or permission of the Department)
J.H. Esling F(3-0)

LING 388 (1½) AN INTRODUCTION TO THE GRAMMAR OF ENGLISH USAGE
A basic functional treatment of the grammar of English, with special emphasis on standard Canadian English usage. The parts of speech and their functional relations will be examined.
B.P. Harris F(3-0)
J. Arthurs F(3-0)

LING 389 (1½) AN ADVANCED GRAMMAR OF ENGLISH USAGE
An examination of the more complex structures of English grammar and their use as functional units at various levels of spoken and written Canadian English. Topics may include stylistic variation and the formal differences between Canadian and British or American usage. (*Prerequisite:* 388 or permission of the Department)
B.P. Harris S(3-0)

LING 390 (1½) THE GROWTH OF MODERN ENGLISH
The linguistic history of the English language from its Proto-Indo-European origins to the present, including non-British English (especially Canadian). Topics will include the causes of language change, the development of the phonological, morphosyntactic and lexical systems of English, and the significance of social and regional dialects. (Not open to students who have credit in ENGL 390 or 440). (*Prerequisite:* A previous course in Linguistics or permission of the Department)
B.P. Harris S(3-0)

LING 392 (1½) CANADIAN ENGLISH
A description of the distinctive features of modern Canadian English, especially in vocabulary, grammar and pronunciation, and an account of the economic, social, and political factors that have given rise to those features. (*Prerequisite:* A previous course in Linguistics, or permission of the Department).
B.P. Harris S(3-0)

LING 393 (1½) DIALECTOLOGY
Dialect geography and its methodology with reference to English dialects including regional variation in Canada. (*Prerequisite:* A previous course in Linguistics or permission of the Department; 392 recommended)
B.P. Harris NO(3-0)

LING 395 (1½) SOCIOLINGUISTICS
A study of language in its social context. Attention is paid to linguistic, dialectal, and stylistic variation in speech communities and the relationship to sociocultural considerations such as class, sex, contextual setting, and ethnicity. Some consideration is given to sociolinguistic dimensions of bilingualism and multilingualism, languages in contact, language switching, and linguistic demography, nonstandard dialects and language standardization, and related educational issues. Consideration will also be given to the functions of language in speech communities, for example, rules of respectful address, conversational turn taking, and the range and interpretation of speech act types. Sociolinguistic implications for theories of language description and language change will be touched upon. (*Prerequisite:* A previous course in Linguistics or permission of the Department)
H. Noro F(3-0)

LING 396 (JAPA 396) (1½) SOCIOLINGUISTIC ISSUES IN JAPANESE
An examination of the Japanese language in its social context. A wide range of sociolinguistic topics will be covered, including non-verbal communication and types of Japanese spoken outside of Japan. Attention will be given to linguistic, dialectal, and stylistic variation in speech communities, and to sociolinguistic considerations such as class, gender, and social setting.
B.P. Harris NO(3-0)

LING 401 (formerly 201) (1½) SALISH: I
An introduction to the linguistic structures of one of the major language families in British Columbia presented through reading and translating myths and ethnographic texts of a selected member language. All texts are also presented orally. In addition to grammar and lexicon, some time is devoted to a consideration of the culture reflected in the texts. Differences between oral and written literature are also discussed. (*Prerequisite:* At least third year standing or permission of the Department)
T.M. Hess F(3-0)

LING 402 (formerly 202) (1½) SALISH: II
The content of this course will vary. In some years it will involve a deeper analysis of the 401 language; in others it will be the same format as 401 presented for a second Salish language. (*Prerequisite:* 401)
T.M. Hess NO (3-0)

LING 408 (1½) ADVANCED MORPHOLOGY
Survey of current theoretical models used to account for the generation of words in English and other languages. Emphasis will be on derivational morphology, especially compounding. Scope will include the role of phonology in morphological theory, the treatment of reduplication in word building, the use of rule formalisms, and the nature of lexical representations. (*Prerequisites:* 230, 251 and 252)
B.F. Carlson F(3-0)

LING 410A (1½) SYNTAX
This course will emphasize syntactic analysis and argumentation in the description of the major structures of English using an extended phrase structure model. (*Prerequisites:* 230, 251 and 252, or Diploma status and 360)
T.E. Hukari F(3-1)

LING 410B (1½) THEORIES OF GRAMMAR
Current issues in syntactic theory are examined from the perspective of contemporary syntactic models such as Government-Binding Theory, Head-Driven Phrase Structure Grammar, Categorial Grammar or Lexical-Functional Grammar. (*Prerequisite:* 410A)
L. Saxon S(3-1)

LING 410C (1½) MATHEMATICAL LINGUISTICS
This course is designed to give the student literacy in certain formal systems relevant to theoretical linguistics. Topics include formal logic, set theory, recursive functions, formal languages, formal properties of natural language. Certain formal properties of contemporary syntactic

theories will be examined late in the course. This course presupposes knowledge of some current syntactic theory (e.g., Government-Binding theory). (Course requirements for Honours and Majors will allow this course to substitute for 410B) (*Prerequisite:* 252)
T.E. Hukari NO(3-1)

LING 420 (1½) COMPARATIVE INDO-EUROPEAN
This course provides an integrated account of the evolution of the principal Indo-European languages. (*Prerequisites:* 230, 251 and 252, or permission of the Department)
G.N. O'Grady F(3-0)

LING 425 (1½) HISTORICAL AND COMPARATIVE LINGUISTICS
An investigation of language change through time. Theoretical considerations in the reconstruction of phonological and other linguistic subsystems. Emphasis will be on the evolution of languages other than Indo-European. (*Prerequisites:* 230, 251 and 252 or equivalent)
G.N. O'Grady NO(3-0)

LING 426 (1½) SEMANTICS
The course addresses the question of meaning and its relation to language. Topics include the concept of the dictionary, types of meaning, uses and abuses of semantic values, analysis of meaning, translation. (*Prerequisite:* 252 or equivalent background)
T.E. Hukari S(3-0)

LING 440 (1½) GENERATIVE PHONOLOGY
Description of sound systems using procedures and theoretical bases of generative phonology. It is intended for students who have had an introduction to phonology and who wish to learn language description using distinctive sound features, notational conventions, and rule interaction formalisms. (*Prerequisite:* 251 or permission of the Department or Diploma status and 360)
B.F. Carlson F(3-0)

LING 441 (1½) ADVANCED PHONOLOGICAL ANALYSIS
This course will survey current issues in phonological theory. Special topics, such as the question of abstractness of underlying representations, the effect of historical change on the sound component of language, the role of grammatical and lexical information in phonology, the treatment of exceptions, and the ways of handling rule interactions and applications will be considered. (*Prerequisite:* 440 or permission of the Department)
B.F. Carlson S(3-0)

LING 448 (1½) DIRECTED READINGS IN LINGUISTICS
(Open only to Major and Honours students with a minimum G.P.A. of 6.50 in Linguistics courses.)
Members of Department F(3-0)

LING 449 (1½) DIRECTED READINGS IN LINGUISTICS
(Open only to Major and Honours students with a minimum G.P.A. of 6.50 in Linguistics courses.)
Members of Department S(3-0)

LING 450 (1½) SEMINAR IN LANGUAGES
An elementary analysis of a language to be selected in consultation with the Department. (*Prerequisites:* 230, 251 and 252)
L. Saxon F(3-0)

LING 451 (1½) SEMINAR IN LANGUAGES
An elementary analysis of a language to be selected in consultation with the Department. (*Prerequisites:* 230, 251 and 252)
L. Saxon F(3-0)

LING 482 (formerly part of 481) (1½) COMPUTATIONAL LINGUISTICS: AN INTRODUCTION
An introduction to the applications of the computer to linguistic problems. (This course is prerequisite to 483, 484, 485) (*Prerequisite:* Written permission of the Department required for students not registered in a Linguistics degree program)
A. Brett F(3-0)

LING 483 (formerly part of 481) (1½) COMPUTATIONAL LINGUISTICS: QUANTITATIVE METHODS
The application of the computer to the analysis of linguistic data in such areas as phonetics and dialectology. (*Prerequisite:* 482. A previous course related to phonetics or dialectology recommended)
A. Brett NO(3-0)

LING 484 (1½) COMPUTATIONAL LINGUISTICS: GRAMMARS
The application of computing methods to contemporary theories of natural language. (*Prerequisites:* 252 and 481 or 482) S(3-0)

LING 485 (1½) COMPUTATIONAL LINGUISTICS: PHONOTACTICS
The application of phonetic and phonological theory to computerized speech synthesis and recognition. (*Prerequisites:* 382, and 481 or 482 or the equivalent of CSC 115) NO(3-0)

LING 499 (3) HONOURS THESIS
The Honours thesis is to be based on supervised research carried out by the student during the final year. The recommended style and format of the Honours thesis are the same as those stipulated for graduate theses.
Members of the Department Y(3-0)

DEPARTMENT OF MATHEMATICS AND STATISTICS

David J. Leeming, B.Sc. (Brit. Col.-Vic. Coll.), M.A. (Ore.), Ph.D. (Alta.), Professor and Chair of the Department
Ernest J. Cockayne, M.A. (Oxon.), M.Sc. (McG.), Ph.D. (Brit. Col.), Professor
Roger R. Davidson, B.Sc. (Queen's), M.A. (Tor.), Ph.D. (Florida St.), Professor
Albert E. Hurd, B.A., M.A. (Tor.), Ph.D. (Stan.), Professor
Reinhard Illner, Dip. (Heidel.), Ph.D. (Bonn), Professor
Robert A. MacLeod, B.Sc. (Alta.), M.S. (Cal. Tech.), Ph.D. (Alta.), Professor
C. Robert Miers, B.A. (Knox Coll.), M.A., Ph.D. (Calif., L.A.), Professor
Robert E. Odeh, M.S., Ph.D. (Carnegie), F.A.S.A. (Washington, D.C.), F.S.S. (Lond.), F.I.M.S. (U.S.A.), Professor
John Phillips, B.Sc. (U. of Vic.), M.A., Ph.D. (Ore.), Professor
William J. Reed, B.Sc., (Imp. Coll., Lond.), M.Sc. (McG.), Ph.D. (Brit. Col.), Professor
Ahmed Ramzi Sourour, B.Sc., (Cairo), M.Sc., Ph.D. (Ill.), Professor
Hari M. Srivastava, B.Sc., M.Sc. (Allahabad), Ph.D. (Jodhpur), F.R.A.S. (Lond.), F.N.A.Sc. (India), F.I.M.A. (U.K.), Professor
Pauline van den Driessche, B.Sc., M.Sc. (Imp. Coll. Lond.), D.I.C., Ph.D. (Wales) Professor
William R. Gordon, B.A., M.A. (Brit. Col.), Ph.D. (Calif., Santa Barb.), Associate Professor
W. Keith Hastings, B.A., M.A., Ph.D. (Tor.), Associate Professor
Denton E. Hewgill, B.Sc., Ph.D. (Brit. Col.), Associate Professor
Lowell A. Hinrichs, M.A., Ph.D. (Ore.), Associate Professor
Bruce R. Johnson, B.S., M.A., (Ore. St.), Ph.D. (Ore.), Associate Professor
Walter P. Kotorynski, B.A. (W. Ont.), M.A., Ph.D. (Tor.), Associate Professor
Donald J. Miller, B.Sc., Ph.D. (McM.), Associate Professor
Gary G. Miller, M.Sc., Ph.D. (Missouri), Associate Professor
William E. Pfaffenberger, M.A., Ph.D. (Ore.), Associate Professor
James Riddell, B.Sc., M.Sc., Ph.D. (Alta.), Associate Professor
Christopher J. Bose, B.Sc. (Brit. Col.), M.Sc., Ph.D. (Tor.), Assistant Professor
Florin N. Diacu, M.Math. (Bucharest), Ph.D. (Heidelberg), Assistant Professor
Charles E. Murley, B.A. (Colo.), M.S., Ph.D. (Wash.), Assistant Professor
Ian F. Putnam, B.Sc. (U. of Vic.), Ph.D. (Calif., Berkeley), Assistant Professor
M. Elizabeth Watton, B.Sc., M.Sc. (McM.), Lecturer
Charles Burton, B.A., M.B.A. (Queen's), Administrative Officer

Marilee V. Garrett, B.A. (Brown), M.Sc. (U. of Vic), Cooperative Education Coordinator (Computer Science and Mathematics)
Megan Jameson, B.A. (U. of Vic), Program Assistant, Cooperative Education Program

Visiting, Adjunct and Cross-listed Appointments:
Robert F. Millar, B.A., M.A. (Tor.), Ph.D. (Cantab.), Adjunct Professor (1990-92)
Fausto Milinazzo, B.Sc., Ph.D. (Brit. Col.), Adjunct Associate Professor (1990-92)
Dale D. Olesky, B.Sc., M.Sc. (Alta.), Ph.D. (Tor.), Professor (Computer Science)
Rekha Srivastava, B.Sc. (Utkal), M.Sc., Ph.D. (Banaras), Adjunct Associate Professor (1991-93)

GRADUATE PROGRAMS

For information on studies leading to the M.A. and M.Sc. degrees, see page 273.

LIMITATION OF ENROLLMENT

Students are advised that, because of limited facilities and staff, it may be necessary to limit enrollment in certain first and second year Mathematics and Statistics courses. Enrollment limits in second year will be imposed primarily on the basis of academic standing. Course enrollment limits will be listed during registration.

GENERAL, MAJOR AND HONOURS PROGRAMS

Mathematics Programs:

For either a B.A. or B.Sc. degree in Mathematics, students may take a General, Major or Honours Mathematics program. The Mathematics course requirements for each program are as follows:

General
(a) 100 and 101
(b) 233A and 233C
(c) 200 and 201
(d) 9 additional units of courses numbered 300 or higher in the Department.

Major
(a) 100 and 101
(b) 233A and 233C
(c) Two of CSC 110, 112 and 115
(d) 200 and 201
(e) 330A and 330B, 333A and one of 333C, 422 or 423
(f) 9 additional units of Mathematics or Statistics courses numbered 300 or higher (of which at least 3 units are numbered 400 or higher) chosen in consultation with the Department.
NOTE: Major students are encouraged to take at least 3 units of Statistics courses.

Major with Probability and Statistics Emphasis
(a) 100 and 101
(b) 233A and 233C
(c) Two of CSC 110, 112 and 115
(d) 200 and 201
(e) STAT 250 and 251
(f) 330A and 330B
(g) 333A and 333C
(h) STAT 350 and 351
(i) 6 additional units chosen from 352, 452, STAT 353, 354, 453, 454 selected to obtain at least 3 units chosen from Mathematics and Statistics courses numbered 400 or higher.

Honours in Mathematics

Students who wish to be admitted to an Honours program in the Department should apply in writing to the Chair of the Department on completion of their second year. Normally a student will be admitted to the third year of an Honours program in the Department only if the student has achieved a first class average in the second year courses taken in the Department. Students are expected to receive credit for at least 7½ units in each campus term. A student whose third year work is not of honours calibre may be required to withdraw from the program. A student graduating in the Honours program will be recommended for a First Class Honours degree if the student has achieved a first class graduating average and a first class average in courses numbered 300 or higher in the Department. A student who completes the Honours degree requirements without attaining a first class standing, but with a graduating average of at least 3.50, will be recommended for a Second Class Honours degree.

The Honours Programs are as follows:
(a) 100 and 101
(b) 233A and 233C
(c) Two of CSC 110, 112 and 115
(d) 200 and 201
(e) 333A and 333C, 334, 336, 338
(f) Completion of one of the following areas of emphasis:
(i) *Pure Mathematics*
a. 15 units from 324, 325, 326, 352, 362, 422, 423, 433C, 435, 445A and 445B, 452, 462, 465, 466, 468, 491A, and 491B and CSC 349A and 349B, chosen in consultation with the Department and of which at least 9 units are numbered 400 or higher.
NOTE: Honours students in Pure Mathematics are encouraged to take at least 3 units of Statistics courses and at least 3 units of Computer Science courses.
(ii) *Applied Mathematics*
a. 12 units acquired by completing any two of the four area options listed.
Combinatorics and Operations Research Option:
422, 423, CSC 448A, 448B
Differential Equations Option:
325, 326, 445A, 445B
Mathematical Statistics and Probability Option:
STAT 350, 351, MATH 352, 452
Numerical Analysis Option:
CSC 349A, 349B, 449A, 449B
b. 3 units chosen from 491A, any course listed in the two area options not selected under a., or CSC 420. The 15 units needed for requirements a. and b. must contain at least 6 units numbered 400 or higher.
(iii) *Probability and Statistics*
a. STAT 250 and 251
b. STAT 350 and 351
c. 6 additional units chosen from MATH 352, 452, STAT 353, 354, 453, 454
d. 6 additional units offered by the Department chosen in consultation with the Department.
At least 6 units chosen from Mathematics and Statistics courses numbered 400 or higher must be completed.
(iv) *Department approved option*
a. 15 units of courses offered by the Department numbered 300 or higher chosen in consultation with the Department. At least 9 of the 15 units must be chosen from courses numbered 400 or higher.

Combined Programs in Chemistry and Mathematics:

For a B.Sc. degree in Combined Chemistry and Mathematics, students may take a Major or Honours program. These programs are not joint degrees in Chemistry and Mathematics, but a single degree program composed of a selected combination of courses from each of the departments. Students opting for either of these combined programs must contact the Chemistry and Mathematics and Statistics Departments, and each student will be assigned an adviser from each of these departments. Students considering proceeding to graduate work in either Chemistry or Mathematics must consult with their advisers prior to making their final choice of courses.

All Combined Chemistry and Mathematics Honours students must complete a minimum of 7½ units of courses per campus term. A student graduating in the combined Honours program is required to obtain a 6.50 or higher graduating average and a grade point average of 6.50 or higher over the group of required 300 and 400 level courses in chemistry and mathematics in order to obtain a First Class Honours degree. To obtain a Second Class Honours degree a student is required to obtain at least a 4.00 graduating average.

First and Second Year (Major or Honours)

CHEM 100[A], or 101[B], or 140[C]	(1½)
CHEM 102, or 245[D]	(1½)
CHEM 213/222/231/235/245	(7½ or 6*)
Two of CSC 110, 112 and 115	(3)
MATH 100/101/200/201/233A/233C	(9)
Two of PHYS 110 (or 125)/120/220	(3)
Other courses (Electives)	(4½ or 6*)

[A] For students with Chemistry 11 and Algebra 12 or Mathematics 12 or equivalents
[B] For students with Chemistry 12 and Algebra 12 or Mathematics 12 or equivalents
[C] For students with at least "B" standing in Chemistry 12 and Algebra 12 or Mathematics 12 or equivalents
[D] For students with at least "B" standing in CHEM 140
*If CHEM 245 completed previously instead of 102

Third and Fourth Year (Major)

(All courses listed below must be 300 level or above)

CHEM 312/323/324/345/346/444 (or 425)/446	(10½)
MATH 325/326/330A/330B/333A	(7½)
One of MATH 333C, 422, or 423	(1½)
Course chosen from the Mathematics and Statistics Department in consultation with that Department	3(1½)
Course(s) chosen in consultation with the Chemistry and Mathematics and Statistics Departments	3(3)
Other courses (Electives)	(6)

Third and Fourth Year (Honours)

(All courses below must be 300 level or above)

All Chemistry courses listed under Major program	(10½)
plus	
CHEM 399/499	(4)
MATH 333A/333C/334/336/338/445A/445B	(10½)
Course(s) chosen from the Mathematics and Statistics Department in consultation with that Department	(3)
Other courses (Electives)	(3)

Some possible courses which might be used to fulfill the units to be chosen in the above programs are: CHEM 306; 318; 335; 337; 338; 424; 425; 444; CSC 349A; 349B; MATH 352; 368A; 368B; (for Honours, 325 and 326); STAT 353*; 354*.
* These courses have STAT 250 and 251 as prerequisites, which would have to be included in the student's program as options.

Combined Programs in Computer Science and Mathematics

For a B.Sc. degree in Combined Computer Science and Mathematics, students may take a Major or Honours program. These programs are not joint degrees in Computer Science and Mathematics, but a single degree program composed of selected courses from each of the departments. Students opting for either of these combined programs must contact the Computer Science and Mathematics and Statistics Departments, and will be assigned an adviser from each of these departments. Students considering proceeding to graduate work in either Computer Science or Mathematics must consult with their advisers prior to making their final choice of courses.

Students who wish to be admitted to the Combined Honours program should apply in writing to the Chairs of the Departments on completion of their second year. Normally a student will be admitted to the combined Honours program only if the student meets the following conditions: completion of CSC 112, 115, 225, 230, and 275; completion of at least 10.5 units of the Mathematics and Statistics courses required for the degree; attainment of a grade of at least B+ in all 200 level CSC courses; attainment of a GPA of at least 6.50 in all 200 level Mathematics and Statistics courses.

Students may also apply and be admitted to the Combined Honours program upon completion of their third year providing:
(i) they have completed all of the 100 level and 200 level courses required for the Combined Honours degree with a GPA of at least 6.00 in these courses, and
(ii) they have completed at least 4.5 units of 300 level courses in Computer Science (including CSC 320 and 349A) and 4.5 units in Mathematics (including MATH 333A and 334) and have obtained a GPA of at least 6.00 in all 300 level Computer Science, Mathematics, and Statistics courses taken.

Honours students are expected to maintain a GPA of at least 5.00 in their third year to remain in the program.

A student graduating in the combined Honours program will be recommended for a First Class Honours degree if the student achieves a graduating average of at least 6.50. A student who does not attain a graduating average of 6.50 will be recommended for a Second Class Honours degree if the student achieves a graduating average of at least 5.00.

First and Second Year (Major or Honours)

MATH 100 and 101	(3)
ENGL 115	(1½)
ENGR 240[1]	(1½)
MATH 233A and 233C	(3)
MATH 200 and 201	(3)
MATH 224	(1½)
STAT 250 and 251	(3)
CSC 112 and 115[2]	(3)
CSC 225, 230 and 275	(4½)

Third and Fourth Year (Major)

MATH 324, 330A and 330B	(4½)
MATH 333A and one of 333C, 422 or 423	(3)
C SC 320, 349A and 349B	(4½)

Courses chosen from the Departments of Computer Science and Mathematics and Statistics at the 300 level or above with at least 6 units at the 400 level. In selecting these courses students are urged to take at least 3 of the additional units in each of the two Departments. (10½)

Third and Fourth Year (Honours)

MATH 334, 336 and 338	(4½)
MATH 324, 333A and 333C	(4½)
CSC 320, 349A and 349B	(4½)
Two of CSC 425, 448A, 449A and 449B	(3)
Courses chosen from the Departments of Computer Science or Mathematics and Statistics at the 300 level	(3)
Courses chosen from the Departments of Computer Science or Mathematics and Statistics at the 400 level	(6)

Students must complete a minimum of units of 400 level courses offered by the Department of Mathematics and Statistics as part of the above program.

[1] ENGL 225 can replace ENGR 240 but this requires 3 units of first year English as prerequisite.
[2] Students with a grade below A in Computer Science 12 are also required to take CSC 110.

Honours in Physics and Mathematics

Admission to the third and fourth years of the Honours Program in Physics and Mathematics requires the permission of both the Department of Physics and Astronomy and the Department of Mathematics and Statistics. The class of the Honours degree of a student graduating in the Honours in Physics and Mathematics Program will be determined on the basis of the grade point average calculated using the best 30 units of approved 300 and 400 level courses. The class designated will be First Class if this average is at least 6.50 and Second Class if this average is at least 3.50.

In year 1 students will take (a) PHYS 120 and 220 or (b) PHYS 110 and 120 (or 120 and 125) or (c) PHYS 100 and 110. In each case the student will then choose subsequent courses indicated by the appropriate letter (a), (b) or (c).

Year I

(a) PHYS 120 and 220 or	(3)
(b) PHYS 110 and 120 or PHYS 120 and 125 or	(3)
(c) PHYS 100 and 110	(3)
3 units of Chemistry	(3)
MATH 100 and 101	(3)
MATH 233A and 233C*	(3)
CSC 110 or 112	(1½)

(Students who believe that they have the equivalent of CSC 110 or 112 may request the Physics and Astronomy and Mathematics and Statistics Departments to waive the CSC 110 or 112 requirement.)

Year II

(a) PHYS 216 or	(1½)
(b) PHYS 220 and 216 or	(3)
(c) PHYS 120, 220 and 216	(4½)
PHYS 214 and 215	(3)
MATH 200 and 201	(3)
MATH 233A and 233C*	(3)

Year III

PHYS 325 and 326	(3)
PHYS 321A and 321B	(3)
PHYS 413A and 413B	(3)
MATH 325 and 326	(3)
MATH 334 and 336	(3)
MATH 338	(1½)
MATH elective**	(1½)

Year IV

(b) PHYS 317	(1½)
(c) PHYS 317	(1½)
PHYS 410 and 421	(3)
PHYS 422 and 423	(3)
PHYS 460	(0)
PHYS electives**	(1½ or 3)
MATH 333A and 333C	(3)
MATH 445A and 445B	(3)
MATH electives**	(3)

* MATH 233A and 233C may be taken in first year, in which case 333A and 333C may be taken in second year.
¤ PHYS 317 may be taken in second year if 220 is taken in first year.
** Mathematics electives are to be chosen in consultation with the Department of Mathematics and Statistics, and Physics electives are to be chosen in consultation with the Department of Physics and Astronomy. Students will normally enroll in 18 units of work in each of third and fourth year.

Notes

1. All students taking a Major or Honours in Mathematics are strongly advised to take at least one University course in Physics.
2. Any students who demonstrate to the Department that they have mastered the material of a course may be granted advanced placement.
3. Students from outside British Columbia, transfer students from community colleges and students who have obtained credit for Grade II Mathematics must consult the Department before enrolling in any Mathematics course.
4. Students planning a career in secondary school mathematics teaching are strongly advised to include MATH 333A as part of their Mathematics degree program.

MATHEMATICS COOPERATIVE EDUCATION PROGRAM

The Cooperative Education Program in the Faculty of Arts and Sciences is described on page 36. Additional general regulations pertaining to Cooperative Education Programs of the University of Victoria are found on page 32.

Full time students in the Cooperative Education Program participate in a combined Mathematics and Computer Science Cooperative Program during their first two years. In their third year, students may opt to complete a degree program in either Computer Science or Mathematics, and will then enter the Coop program in that department. Students who opt for the Major or Honours in Combined Computer Science and Mathematics, or for a Double Major or Double Honours in Computer Science and Mathematics, will remain in the combined Computer Science/Mathematics Coop Program.

The minimum academic requirements for entering the Mathematics and Computer Science Program are a grade point average of 4.50, a minimum grade point average of 5.50 in courses completed in the Departments of Computer Science and Mathematics and a grade of at least B- in each course completed in the Departments of Computer Science and Mathematics and Statistics. Students are normally admitted to the Program in January, after the first term on campus, and application for admission should be made before the end of the first term. First year students wishing to apply for entry to the program should enroll in Mathematics 100 and 101, Computer Science 112 and 115, and Statistics 250.

In order to graduate in the Mathematics Cooperative Program or the combined Mathematics Computer Science Cooperative Program students must:

(i) successfully complete a minimum of four Work Terms. (The granting of Work Term credit by challenge is not permitted.)
(ii) successfully complete the following thirteen courses, MATH 100, 101, 200, 201, 224, 233A and 233C, CSC 112, 115, 225, 230 and 275, and STAT 250. (Note that students without a grade of A or higher in Computer Science 12 are also required to take CSC 110.)
(iii) satisfy the course requirements of any of the Major or Honours degree programs offered by the Department of Mathematics and Statistics.

Students registered in the Coop Program must be enrolled in at least 6 units of course work during each campus term. The performance of students will be reviewed after each Campus Term and each Work Term. Students whose performance is deemed to be unsatisfatory by the Computer Science and Mathematics Coop Committee may be required to withdraw from the program.

Each Work Term is recorded on the student's academic record and transcript (as COM, N or F) and details of Work Terms are recorded on the Record of Work Terms which is attached to the student's academic record and transcript.

Further information concerning the Cooperative Education Program in Mathematics may be obtained from the Department.

Notes:

(1) Each student who is admitted to the Coop program during first year of University must complete all five scheduled Work Terms.
(2) Students who transfer from other institutions and all students admitted to the Coop Program in their second year of University must complete at least four Work Terms and must complete all scheduled Work Terms in their program.

UNDERGRADUATE COURSES

(Course offering codes: Y = Sept.-Apr., F = Sept.-Dec., S = Jan.-Apr., K = May-Aug., NO = Not offered, this session)

MATHEMATICS

Students should consult the Department concerning courses offered in any particular year.

MATH 012 (no credit) PRECALCULUS MATHEMATICS (3 fee units)
The essentials of Algebra 12 which are prerequisite to Mathematics 100 and 102. Topics covered include: set language, algebra of polynomials, relations, functions and their graphs, conics, trigonometry, plane analytic geometry. FS(3-0)

MATH 100 (1½) CALCULUS: I
Review of analytic geometry; functions and graphs; limits; derivatives; techniques and applications of differentiation; antiderivatives; the definite integral and area; logarithmic and exponential functions; trigonometric and hyperbolic functions. (*Prerequisite:* Algebra 12 or its equivalent) (Not open to students with credit in 102) FS(4-0)

MATH 101 (1½) CALCULUS: II
Volumes; arc length and surface area; techniques of integration with applications; Newton's method, trapezoidal and Simpson's rules; polar coordinates and area; l'Hospital's rule; Taylor's formula; improper integrals; series and tests for convergence; power series and Taylor series. (*Prerequisite:* 100 or equivalent) FS(4-0)

MATH 102 (1½) CALCULUS FOR STUDENTS IN THE SOCIAL AND BIOLOGICAL SCIENCES
Calculus of one variable with applications to the social and biological sciences. Exponential growth. (*Prerequisite:* Algebra 12 or its equivalent) (Not open to students with credit in 100.) FS(3-0)

MATH 133 (1½) MATRIX ALGEBRA FOR ENGINEERS
Complex numbers; matrices and basic matrix operations; vectors; linear equations; determinants; eigenvalues and eigenvectors; linear depend-

ence and independence; orthogonality. (*Prerequisite:* Admission to the Faculty of Engineering) (Not open to students with credit in 110 or 233A) F(3-0-1)

MATH 151 (1½) FINITE MATHEMATICS
Geometric approach to linear programming, linear systems, Gauss-Jordan elimination, matrices, compound interest and annuities, permutations and combinations, basic laws of probability, conditional probability, independence, urn problems, tree diagrams and Bayes formula, random variables and their probability distributions, Bernoulli trials and the binomial distribution, hypergeometric distribution, expectation, applications of discrete probability and Markov chains. (*Prerequisite:* Algebra 12 or its equivalent, or MATH 012, which may be taken concurrently during the first term) (Students who have credit for 352, or for 233A and one of 222 or STAT 250, may not register in 151 for credit.) FS(3-0)

MATH 160A (formerly half of 160) (1½) MATHEMATICS FOR THE ELEMENTARY TEACHER: I
Sets, functions, and logic; whole numbers, divisibility, and elementary number theory; the integer, rational, and real number systems together with associated algorithms. (*Prerequisite:* Algebra 11 or consent of the Department) (Not open to students who have completed or are currently registered in any other university level mathematics course) FS(3-0)

MATH 160B (formerly half of 160) (1½) MATHEMATICS FOR THE ELEMENTARY TEACHER: II
Ratio, percent and interest; measurement and the metric system; elementary geometry, symmetry, congruence and similarity; probability. (*Prerequisite:* 160A) (Not open to students who have completed or are currently registered in any other university level mathematics course except 160A) FS(3-0)

MATH 200 (1½) CALCULUS OF SEVERAL VARIABLES
Vectors and vector functions; solid analytic geometry; partial differentiation; directional derivatives and the gradient vector; Lagrange multipliers; multiple integration with applications; cylindrical and spherical coordinates; surface area; line integrals; Green's Theorem. The section of this course for engineering students will also cover the following topics: surface integrals and the divergence theorem. (*Prerequisite:* A grade of C or higher in 101) FS(3-0-1)

MATH 201 (1½) INTRODUCTION TO DIFFERENTIAL EQUATIONS
Principally a first course in ordinary differential equations. First order equations; geometric interpretation; direction fields and integral curves; applications to the physical and biological sciences; linear equations of higher order; solutions of constant coefficient equations and their application to vibration problems; nonlinear second order equations and examples; the phase plane; singular points and global behaviour of some examples. As time permits, the Laplace transform and some simple partial differential equations. (*Prerequisite:* A grade of C or higher in 101) FSK(3-0-1)

MATH 224 (1½) LOGIC AND FOUNDATIONS
An introduction to logic and the foundations of discrete mathematics. Propositions, Boolean connectives, predicates, quantifiers, and methods of proof, including mathematical induction. Sets, functions and relations; the basics of aomatic set theory. Algebraic structures including Boolean algebras and switching circuits. (*Prerequisite:* 101, or 102 and 151, or written permission of the Department) (Not open to students with credit in 222, 422 or 423) FK(3-0)

MATH 233A (1½) MATRIX ALGEBRA: I
Matrices: simultaneous equations; determinants; vectors in 2-, 3- and n-tuple space; inner product; linear independence and rank; change of coordinates; rotation of axes in 2- and 3-dimensional Euclidean space; orthogonal matrices; eigenvalues and eigenvectors. (*Prerequisite:* 3 units of 100 level mathematics courses; a student who has received an A grade in Algebra 12 or Mathematics 12 may apply to the Department for a waiver of this prerequisite.) (Not open to students with credit in 110 or 133) FS(3-0)

MATH 233B (1½) MATRIX ALGEBRA: II
This course is not intended for students majoring in mathematics. Eigenvalues, eigenvectors and diagonalization of complex matrices with applications; orthogonal and unitary matrices; positive definite matrices with applications. (*Prerequisites:* 100 or 102, and 233A or 133) (Not open to students with credit in 333C) (This course is intended primarily for second year physics students or other science students with a strong mathematical background.) S(3-0)

MATH 233C (1½) INTRODUCTION TO ALGEBRA
The integers, induction, factorization, congruences. Definition and examples of rings, fields and integral domains. Rational numbers, real numbers, complex numbers. Polynomials and their factorization. Permutations; definition and examples of groups. Additional topics chosen from Boolean algebras and lattices; transfinite arithmetic. (*Prerequisite:* 233A or 110 or 133, and a grade point average of at least 3.00 in all 200 level mathematics and statistics courses completed) (This course is intended primarily for Mathematics students.) SK(3-0)

MATH 240 (3) MATHEMATICS FOR STUDENTS IN ECONOMICS AND COMMERCE
Techniques of integration; multivariable calculus; optimization; difference and differential equations with applications; linear programming; further topics in probability and linear algebra. (*Prerequisite:* 151 and 102, or 151 and 100) (Students who have obtained credit for 100 and 101 may enroll for 240 provided they enroll for 151 concurrently) (Not open to students with credit for 200 or 201) Y(3-0)

MATH 242 (1½) MATHEMATICS OF FINANCE
Compound interest and annuities-certain; analysis of securities, yield rates; equations of value; mortgages, amortization, sinking funds; depreciation, depletion and capitalization costs; mortality tables, life insurance and annuities. (*Prerequisite:* 102 and 151, or 101 and some knowledge of probability) (Not open to students with credit for 152) S(3-0)

Students with a D grade in Second Year Mathematics courses are advised not to register for further courses in Mathematics.

MATH 321 (1½) DIFFERENTIAL EQUATIONS FOR ENGINEERS
An introduction to methods for solving partial differential equations: basic concepts; derivation of the heat and wave equations (heat transfer, vibrations of membranes and strings); classification of second order partial differential equations; separation of variables; Fourier series solution; eigenfunction space, Bessel and Legendre functions; introduction to numerical methods. Optional topics: systems of ordinary differential equations, classical and direct methods in the calculus of variations. (*Prerequisites:* 200 and 201, and admission to the Faculty of Engineering (Not open to students with credit in 323B or 326) K(3-0)

MATH 323A (1½) APPLIED DIFFERENTIAL EQUATIONS: I
A review of the material on differential equations covered in 201. Special methods for first order differential equations, linear differential equations of first and higher orders with constant coefficients, Euler's equations, series solutions of selected second order differential equations with variable coefficients with special attention to Bessel's, Legendre's and hypergeometric equations. Laplace transforms and their applications to initial-value problems. (Primarily for students in the Physical Sciences) (*Prerequisites:* 200 and 201) (Credit cannot be obtained for both 323A and 325. This course cannot in general be included as part of the Mathematics and Statistics Department's requirements for the Major or Honours degree.) F(3-0)

MATH 323B (1½) APPLIED DIFFERENTIAL EQUATIONS: II
Systems of linear differential equations, numerical methods, boundary value problems including orthogonal functions and Fourier series. Partial differential equations and their applications to problems in physics. (Primarily for students in the Physical Sciences) (*Prerequisite:* 323A) (Credit cannot obtained for both 323B and 326. This course cannot in general be included as part of the Mathematics and Statistics Department's requirements for the Major or Honours degree.) SK(3-0)

MATH 324 (1½) DISCRETE AND COMBINATORIAL MATHEMATICS
An introduction to combinatorics and discrete mathematics. Graphs: trees, colouring, planarity, Hamilton and Euler cycles, network flows and mtching. Counting: permutations, combinations, set and numerical

partitions, inclusion-exclusion. Recurrence relations: linear recurrences, generating functions, divide and conquer recurrences. (*Prerequisite:* 224 or 233C or written permission of the Department) (Not open to students with credit in 222, 422 or 423) S(3-0)

MATH 325 (1½) INTERMEDIATE ORDINARY DIFFERENTIAL EQUATIONS

The Laplace transform; series solutions of linear ordinary differential equations about ordinary points and regular singular points; solutions of Bessel's and other classical equations; linear systems of ordinary differential equations, exponential of a matrix; stability, the methods of Liapunov and applications; approximate solution of ordinary differential equations; regular and singular perturbation theory and numerical methods. (*Prerequisites:* a grade of C or higher in 200 and 201, and 133 or 233A. *Corequisite:* 330A or 334) (Credit will not be given for both 323A and 325) F(3-0)

MATH 326 (1½) INTRODUCTION TO PARTIAL DIFFERENTIAL EQUATIONS

First order equations; linear equations and characteristics; nonlinear equations, the Monge cone and characteristic strips; classification of second order equations, characteristics; reduction to normal form, classical equations of mathematical physics; solution by separation of variables and Fourier series; introduction to the Fourier transform; classical and direct methods in the calculus of variations. (*Prerequisite:* 325) (Credit will not be given for both 323B and 326) SK(3-0)

MATH 330A (1½) ADVANCED CALCULUS

Sequences and series of real numbers; sequences and series of real valued functions; uniform convergence; Fourier series; differentiation and integration of series of real valued functions; power series; Taylor series; Taylor's formula with remainder; multivariate calculus; implicit function, Stokes and divergence theorems. (*Prerequisites:* 200 and 201) (Not open to students who have credit for 334) F(3-0)

MATH 330B (1½) INTRODUCTION TO COMPLEX VARIABLES

An introduction to the theory of functions of a complex variable, analytic functions, elementary functions, integration, power series, residue theory. (*Prerequisite:* 330A) (Not open to students who have credit for 338) SK(3-0)

MATH 333A (1½) ABSTRACT ALGEBRA: I

Groups, rings and fields, including quotient structures. (*Prerequisite:* 233C or permission of the Department) F(3-0)

MATH 333C (1½) LINEAR ALGEBRA

Vector spaces and linear transformations; the canonical forms; inner product spaces and the spectral theorem. (*Prerequisite:* 233C or 233B or 210) S(3-0)

MATH 334 (1½) FOUNDATIONS OF ANALYSIS

Sets and functions, the real number system, set equivalence, sequences and series, introduction to point set and metric topology, limits and continuity in metric spaces. (Primarily for Honours students. Not open to students who have credit for 430) (*Prerequisites:* 200 and 201 and the consent of the Department) F(3-0)

MATH 336 (1½) REAL ANALYSIS: I

Theory of differentiation; Reimann-Stieltjes integration; Fourier series; functional analysis. (Primarily for Honours students) (*Prerequisite:* 334) S(3-0)

MATH 338 (1½) INTRODUCTION TO COMPLEX ANALYSIS

Elementary functions of a complex variable, analytic functions, differentiation and integration of functions of a complex variable, power series and residue theory. (Primarily for Honours students. Not open to students who have credit for 330B) (*Prerequisite:* 334) S(3-0)

MATH 352 (1½) INTRODUCTION TO PROBABILITY

Probability spaces, combinatorial analysis, conditional probability, independence, inclusion-exclusion, random variables, expectation, discrete and continuous distributions, limit theorems. (*Prerequisite:* 200 or 240) F(3-0)

MATH 362 (1½) ELEMENTARY NUMBER THEORY

Divisibility, primes, congruences, arithmetic functions, primitive roots, quadratic residues, basic representation and decimals, and a selection from the following topics: Pythagorean triples, representation as sums of squares, infinite descent, rational and irrational numbers, distribution of primes. (For Mathematics Majors and Honours students, and for students planning to teach mathematics in secondary schools. (*Prerequisite:* 3 units of 200 level mathematics courses) F(3-0)

MATH 368A (1½) EUCLIDEAN GEOMETRY

The real affine and projective planes; Euclidean geometry; modern elementary geometry; elementary transformations; Euclidean constructions; the fundamental theorem of polygonal dissection; projectivities; proper conics. (*Prerequisite:* At least six units of mathematics or the consent of the Department) (Not open to students with credit for 366) F(3-0)

MATH 368B (1½) NON-EUCLIDEAN GEOMETRY

The parallel postulate; hyperbolic geometry; elliptic geometry; double elliptic geometry; the Poincaré model. (*Prerequisite:* At least six units of mathematics or the consent of the Department) S(3-0)

NOTE: Admission to the following courses is by permission of the instructor or the Department.

MATH 422 (1½) COMBINATORIAL MATHEMATICS

Permutations and combinations, generating functions, recurrence relations, inclusion-exclusion principle. Mobius inversion, Polya's enumeration theorem. Ramsey's theorem, systems of distinctive representatives, combinatorial designs, algorithmic aspects of combinatorics. (*Prerequisite:* 324; 333A, which may be taken concurrently) S(3-0)

MATH 423 (1½) GRAPH THEORY

An introduction to the combinatorial, algorithmic and algebraic aspects of graph theory. (*Prerequisite:* 324) F(3-0)

MATH 430 (1½) TOPICS IN REAL ANALYSIS

A selection from the following topics: Cauchy or Dedekind construction of the real numbers; cardinality of integers, rationals and reals (types of infinities), open and closed sets; Heine-Borel and Bolzano-Weierstrass theorems; basic theorems from calculus. (Not open to students who have credit for 334) (Primarily for students in Secondary Education or those taking a Major in Mathematics) (*Prerequisite:* 330A or consent of the Department) S(3-0)

MATH 431 (1½) TOPICS IN COMPLEX ANALYSIS

A continuation of the complex analysis begun in Mathematics 330B. (Primarily for students taking a Major in Mathematics) (*Prerequisite:* 330B or 338) NO(3-0)

MATH 433C (1½) ABSTRACT ALGEBRA: II

Field theory; composition series of groups; Galois Theory. (*Prerequisites:* 333A, and 333C or 333B) NO(3-0)

MATH 433D (1½) APPLIED ALGEBRA

A survey of the applications of algebraic structures in computer science, applied mathematics, and electrical engineering. Topics to be covered include: switching circuits, finite state machines, state diagrams, machine homomorphism, group and matrix codes. Optional topics include Polya-Burnside enumeration, Latin squares, primality testing. (*Prerequisite:* 333A) NO(3-0)

MATH 435 (1½) REAL ANALYSIS: II

Lebesgue measure and integration. The Lp spaces. Introduction to Hilbert and Banach spaces. (Primarily for Honours students) (*Prerequisite:* 336 or the consent of the Department) F(3-0)

MATH 445A (1½) ADVANCED ORDINARY DIFFERENTIAL EQUATIONS

Existence; uniqueness; continuous dependence; series solutions; examples and convergence; the Sturm-Liouville theory, Fourier series; convergence and completeness; attractors; other topics as time permits. (*Prerequisites:* 336 or the consent of the Department) F(3-0)

MATH 445B (1½) ADVANCED PARTIAL DIFFERENTIAL EQUATIONS
The Cauchy-Kowale Kaya theorem; geometric theory of first order partial differential equations; well posed problems; elliptic equations; semigroups. (*Prerequisite:* 336 or consent of the Department) S(3-0)

MATH 452 (1½) STOCHASTIC PROCESSES
Introduction to the branch of probability theory which deals with the mathematical analysis of systems that evolve in time while undergoing chance fluctuations. Main topics include random walks, Markov chains, Poisson processes, birth and death processes, renewal theory. Examples illustrate wide applicability of stochastic processes in many branches of science and technology. (*Prerequisites:* 330A or 334, and either 352 or STAT 350) S(3-0)

MATH 462 (1½) NUMBER THEORY
A selection of topics which may include compositions and partitions, geometry of numbers, rational approximation, distribution of primes, order of magnitude of arithmetic functions, proofs of the Prime Number Theorem and of Dirichlet's Theorem on primes in arithmetic progressions, continued fractions. (*Prerequisites:* Grade of B- or higher in 362, and consent of the instructor) S(3-0)

MATH 465 (1½) INTRODUCTION TO TOPOLOGY
Basic concepts of point set topology. (*Prerequisite:* 334, which may be taken concurrently, or 330A or the consent of the Department) F(3-0)

MATH 468 (1½) TOPICS IN GEOMETRY
Appropriate topics may be selected from among the following: finite Desarguesian spaces; symmetry geometry; polyhedra; geometric designs and tactical configurations; axiomatics. Since the same topic will not be offered in two successive years, the course may be repeated for credit. (*Prerequisite:* 368A or the consent of the Department) NO(3-0)

MATH 490 (1½ or 3) DIRECTED STUDIES IN MATHEMATICS
Students must consult the Department before registering. This course may be taken more than once in different fields with permission of the Chair of the Department.

MATH 491A (1½) TOPICS IN APPLIED MATHEMATICS
Through this course the Department offers advanced topics in various areas of applied mathematics. Possible topics include population modeling, stochastic processes, discrete optimization, actuarial mathematics, calculus of variations, and fluid mechanics. Information on the topics available in any given year will be available from the Chair of the Department. Entry to this course will be restricted to third or fourth year students who meet the prerequisite specified for the topic to be offered. This course may be taken more than once in different topics with permission of the Chair of the Department.
This year: "Industrial Mathematics" F(3-0)

MATH 491B (1½) TOPICS IN PURE MATHEMATICS
Through this course the Department offers advanced topics in various areas of pure mathematics. Possible topics include advanced complex analysis, functional analysis, introduction to manifolds, introduction to differential geometry, and mathematical logic. Information on the topics available in any given year will be available from the Chair of the Department. Entry to this course will be restricted to third or fourth year students who meet the prerequisite specified for the topic to be offered. This course may be taken more than once in different topics with permission of the Chair of the Department.
This year: "Differential Geometry" S(3-0)

STATISTICS

STAT 250 (1½) INTRODUCTION TO STATISTICS: I
Elementary probability theory; random variables, discrete and continuous probability distributions, expectation; joint distributions; linear functions of random variables; basic principles of statistical inference; random sampling; point estimates and their standard errors; interval estimation; one- and two-sample problems; an introduction to hypothesis testing, probability value. (*Prerequisite:* MATH 100 or 102) (See Credit Limit, page 15) FS(3-0)

STAT 251 (1½) INTRODUCTION TO STATISTICS: II
Hypothesis testing; sampling distributions; introduction to analysis of variance, regression and correlation; analysis of contingency tables; tests for goodness of fit; nonparametric methods. (*Prerequisite:* Grade of C+ or higher in 250, or 254 and permission of the Department) (See Credit Limit, page 15) FS(3-0)

STAT 254 (1½) PROBABILITY AND STATISTICS FOR ENGINEERS
Probability axioms, properties of probability, counting techniques, conditional probability, independence, random variables, discrete and continuous probability distributions, expectation, variance; binomial, hypergeometric, negative binomial, Poisson, uniform, normal, gamma and exponential distributions; discrete and continuous joint distributions, independent random variables, expectation of functions of random vectors, covariance, random samples and sampling distributions, central limit theorem; point and interval estimation for one and two sample problems; linear regression and correlation. (*Prerequisite:* Admission to the Faculty of Engineering. *Corequisite:* MATH 200) (Credit cannot be obtained for both 254 and 250) (See Credit Limit, page 15) K(3-0-1)

STAT 350 (1½) MATHEMATICAL STATISTICS: I
Discrete and continuous probability models, random variables and their distributions, mathematical expectation, moment generating functions, sums of random variables, limit theory, and sampling distributions. Emphasis on the probability theory needed for 351. (*Prerequisites:* 251 and MATH 200) F(3-0)

STAT 351 (1½) MATHEMATICAL STATISTICS: II
Brief introduction to decision theory, point and interval estimation, hypothesis testing; regression and correlation, analysis of variance. Emphasis on the mathematics of statistics. (*Prerequisite:* 350) S(3-0)

STAT 353 (1½) APPLIED REGRESSION ANALYSIS
An outline of linear regression theory with applications. (*Prerequisite:* 250 and 251 or permission of the instructor) F(3-0)

STAT 354 (1½) SAMPLING TECHNIQUES
Principal steps in planning and conducting a sample survey. Sampling techniques including stratification, systematic sampling and multistage sampling. Practical survey designs with illustrations. Nonsampling errors. (*Prerequisite:* 250 and 251 or permission of instructor) S(3-0)

STAT 453 (1½) THE DESIGN AND ANALYSIS OF EXPERIMENTS
An introduction to the principles of experimental design and the techniques of analysis of variance. A discussion of experimental error, randomization, replication, and local control. Analysis of variance is developed for single factor and multifactor experiments. The use of concomitant observations. Multiple comparisons and orthogonal contrasts. (*Prerequisites:* 251; 353 or some experience or familiarity with experimentation) F(3-0)

STAT 454 (1½) TOPICS IN APPLIED STATISTICS
Possible topics include: Multivariate analysis, multidimensional scaling methods, clustering methods, and time series analysis. Information on the topics available in any given year may be obtained from the Chair of the Department. This course may be taken more than once in different topics with permission of the Chair of the Department. (*Prerequisites:* 353 and the consent of the instructor)

MEDIEVAL STUDIES

Director: John J. Tucker, B.A., M.A., (Tor.), B. Litt., (Oxon.), Ph.D. (Tor.), Associate Professor (English)

Medieval culture, which flourished in Europe and elsewhere from about A.D. 300-1500, lends itself well to interdisciplinary study, since a proper understanding of the life of the Middle Ages requires a knowledge of the history and thought of the period, especially as expressed in its various literatures, languages, and arts.

Major and Honours programs are not available. However, a General

program is offered. Also, Major and Honours students in other departments may obtain a Minor in Medieval Studies by completing the requirements for the General program with courses in areas outside that of their Major or Honours concentration (see Minor, page 36).

GENERAL PROGRAM

The General Program consists of 301 and 302 and an additional six units of medieval courses at the 300/400 level to be approved by the Director of the Medieval Studies Program. Students on a General Program or those wishing to combine a Medieval Studies Minor with a Major or Honours Degree must select their courses from areas outside their field of concentration.

SUGGESTED COURSES:
ENGL 340 (1½) Introduction to Old English
ENGL 341 (1½) Old English Literature
ENGL 346 (1½) Introduction to Old Icelandic
ENGL 347 (1½) Old Icelandic Literature
ENGL 351 (1½) The Canterbury Tales
ENGL 352 (1½) Chaucer Studies
ENGL 353 (1½) Studies in Medieval English Literature
ENGL 354 (1½) Old and Middle English Literature in Translation.
ENGL 440 (1½) History of the English Language
FREN 425 (3) History of the Language
FREN 440 (1½ or 3) Medieval Literature
GER 411 (1½) Medieval German Literature
SPAN 470A (1½) Early Medieval Literature
SPAN 470B (1½) Late Medieval Literature
SPAN 490A (1½) History of the Spanish Language
ITAL 470 (1½) Dante's Divine Comedy
ITAL 472 (1½) Petrarch and Boccaccio
HIST 380 (1½) Problems in Medieval Europe
HIST 433B (1½) Pre-Modern China
HIST 435 (1½) Feudalism in Japan
H A 321 (1½) Late Classical and Early Christian History in Art
H A 323 (1½) Byzantine History in Art
H A 326 (1½) Early Medieval History in Art
H A 328 (1½) Gothic Art and Architecture
H A 352 (1½) Genesis of Islamic Art and Architecture
H A 354 (1½) Medieval Islamic Art and Architecture
H A 357 (1½) Amirates and Sultanates of the Muslim Mediterranean
H A 358 (1½) Islam and Asia
H A 371 (1½) Early Chinese Art
H A 373 (1½) Early Japanese Art and Architecture
H A 420 (3) Special Studies in Medieval Art
H A 450 (1½ or 3) Topics in Islamic Art and Civilization
H A 451 (1½) Islamic Architecture
MUS 311 (3) Music of the Medieval Period and the Renaissance
THEA 307 (1½) Studies in Medieval Theatre

Students, especially those considering graduate studies in this field, are urged to take advantage of the Latin courses offered by the Classics department. Also recommended are HIST 236 (Medieval Europe) and PHIL 245 (Medieval Philosophy).

Combined Medieval Studies Minor and English Honours

Students in the Medieval Studies Program who are enrolled also in the English Honours Program may earn a Combined English Honours and Medieval Studies Minor degree. To do so they must complete MEDI 301 and MEDI 302, together with 3 units selected from the Medieval courses (apart from English courses) which are included in the list of suggested courses for the Medieval Studies Program. In addition they must satisfy their English Honours (e)* requirement and 1½ units of their (k)* requirement with courses from the following list: 340, 341, 346, 347, 352, 353, 354. (See page 63.)

*(e) At least 1½ additional units from the period before 1660: 340, 341, 346, 347, 352, 353, 354, 359, 360, 361, 362, 363, 364, 369, 410.
*(k) Electives: at least 4½ units (or 6 units, if English 360 has been taken instead of 366) from English Department courses numbered 300 and above.

COURSES

(Course offering codes: Y=Sept.-Apr., F=Sept.-Dec., S=Jan.-Apr., K=May-Aug., NO=Not offered, this session)

MEDI 250 (LATI 250) (1½) MEDIEVAL LATIN

After an introduction to medieval Latin grammar, the course will explore the varied tradition of medieval Latin literature, from St. Augustine's *Confessions* to Petrarch's letters, from theological discourses to drinking and love songs, from crusade chronicles to ghost stories. Passages will be read and discussed in the context of medieval culture and society. (*Prerequisite:* LATI 100 or its equivalent; *corequisite:* LATI 200 or permission)
E.F. Archibald S(3-0)

MEDI 301 (1½) THE MIDDLE AGES: I

An interdisciplinary introduction to the Middle Ages. The origins of medieval civilization and the development of its characteristic institutions until about A.D. 1200 will be examined through a study of the art, society, and history of Europe in this period. Comparable developments in the East will also be considered. (*Prerequisite:* At least second year standing or permission of the Director of Medieval Studies; HIST 236 recommended)
J.J. Tucker F(3-0)

MEDI 302 (1½) THE MIDDLE AGES: II

An interdisciplinary introduction to the later Middle Ages. The flowering and dissolution of medieval culture between about A.D. 1200 and 1500 will be explored in the art, thought, and history of Europe during these centuries. (*Prerequisite:* At least second year standing or permission of the Director of Medieval Studies; HIST 236 recommended)
J.J. Tucker S(3-0)

MEDI 401 (1½) SELECTED TOPICS IN MEDIEVAL CULTURE

An interdisciplinary investigation of a selected topic in the evolution of medieval culture, with an emphasis to be placed on the artistic, intellectual, or spiritual life of the time. (May be taken more than once in different topics for a maximum of 6 units) (*Prerequisite:* At least second year standing or permission of the Director of Medieval Studies; MEDI 301 and 302 recommended)
401A "Manuscript Production in the Middle Ages" (HIST 380)
T.S. Haskett and M.M. Mulchahey F(3-0)
401B "Medieval Celtic Societies and Literature"
W. Sayers F(3-0)

MEDI 441 (FREN 441) (½) MEDIEVAL ARTHURIAN ROMANCE

Origins and evolution of Medieval Arthurian romance through an examination of representative texts. The language of instruction is English. Students enrolled in MEDI 441 must submit all written assignments in English; students enrolled in FREN 441 must submit all written assignments in French.
B. Beardsmore S(3-0)

DEPARTMENT OF PACIFIC AND ASIAN STUDIES

Yuen-Fong Woon, B.A., M.A. (H.K.), Ph.D. (Brit. Col.), Associate Professor and Chair of the Department
Daniel J. Bryant, B.A. Ph.D. (Brit. Col.), Associate Professor
Hsin-i Hsiao, B.A., (Tunghai), M.A., Ph.D. (Harv.), Associate Professor
Joe B. Moore, B.A. (Wyo.), M.A. (Calif.-Berk.), Ph.D. (Wis.), Associate Professor

Richard King, B.A., M.A. (Cantab.), Ph.D. (Brit. Col.), Assistant Professor
R. Christopher Morgan, B.A., M.A. (U. of Vic.), Ph.D. (A.N.U.), Assistant Professor
Hiroko Noro, B.A., M.A. (Aoyama Gakuin), Ph.D. (Tor.), Assistant Professor
M. Cody Poulton, B.A., M.A., Ph.D. (Tor.), Assistant Professor
B. Morgan Young, B.A. (Alta.), M.A., Ph.D. (Brit. Col.), Assistant Professor

Visiting and Adjunct Appointments:
James A. Boutilier, B.A. (Dal.), M.A. (McM.), Ph.D. (Lond.), Adjunct Professor (1990-91)
Oscar G. Perez de Tagle, B.A. (Santo Tomas), M.A. (Philippines), Ph.D. (Wis.), Adjunct Professor (1990-91)
Yasuko France, B.A. (Tokyo), M.Ed. (Mass.), Visiting Lecturer (1989-90)
Nozomi Riddington, B.A. (Tokyo Women's Christian), M.A., M.F.A. (Mass.), Visiting Lecturer (1990-91)

LIMITATION OF ENROLLMENT

Students are advised that because of limited staff and facilities it may be necessary to restrict enrollment in some courses in Chinese, Japanese or Pacific Studies programs.

PACIFIC STUDIES PROGRAM

The Interdisciplinary Pacific Studies Program is designed to provide a concentration to be used for both general education and professional purposes. Its initiation stems from Canada's rapidly developing interest in the Pacific area, the location of Victoria in relation to the Pacific and a recognition that Canadians need to know more about the region.

The Department offers both general and major programs in Pacific Studies. All majors must at the beginning of the third year complete a program planning form for the Pacific Studies Program Advisor (available from the Departmental office) and consult her/him if there is a specific problem in course selection.

GENERAL IN PACIFIC STUDIES

Requirements:
First and Second Years
PACI 200 (3)
PACI 290 (or a similar theory and methods course) (1½)

Third and Fourth Years
Any three out of four sequences listed below:
PACI 319A/B, 321A/B, 323A/B, 328A/B (9)
6 units of electives (6)
Of these 15 units, each of the following regions must be covered by at least 1½ units: Japan, China, Southeast Asia, Pacific Islands

MAJOR IN PACIFIC STUDIES

The Major in Pacific Studies is subdivided into three area concentrations: a) China, b) Japan, c) Oceania-Southeast Asia. For the China and Japan concentrations, 9 units of language training are required and 12 are strongly recommended. Students who choose to major in Pacific Studies with a Japan or China concentration cannot simultaneously obtain a minor degree in Japanese or Chinese Studies. The requirements for these three area concentrations are as follows:

a) China concentration:

First and Second Years
CHIN 100A/B, 200; or 149, 150 (6)
PACI 200 (3)
PACI 290 (1½)

Third Year
CHIN 300 (3)
PACI 319A/B, plus (3)
One of the following sequences:
PACI 321A/B, 323A/B, 328A/B (3)

Fourth Year
A China or Taiwan seminar (chosen from PACI 417, 420, 434A, 434B, CHIN 305, 306) (1½)
A 400 level seminar on Oceania, Japan, or Southeast Asia (1½)
PACI 490 or CHIN 490 (3)
Electives: nine additional units of 300-400 level courses (9)

b) Japan concentration:

First and Second Years
JAPA 100A/B, 200; or 149, 150 (6)
PACI 200 (3)
PACI 290 (1½)

Third Year
JAPA 300 (3)
PACI 321A/B, plus (3)
One of the following sequences:
PACI 319A/B, 323A/B, 328A/B (3)

Fourth Year
A Japan seminar (chosen from PACI 422, 435, 436A, 436B, 437, JAPA 303A, 303B, 320B, 396) (1½)
A 400 level seminar on China, Oceania, or Southeast Asia (1½)
PACI 490 or JAPA 490 (3)
Electives: nine additional units of 300-400 level courses (9)

c) Oceania-Southeast Asia concentration:

Six units 100-200 level courses in human society, politics, economics, religion or art which are prerequisite for upper level courses on Oceania and Southeast Asia. (Courses in an Asian language are also acceptable.) (6)

First and Second Years
PACI 200 (3)
PACI 290 (1½)

Third Year
PACI 328A/B (3)
PACI 323A/B, plus (3)
One of the following sequences:
PACI 319A/B, 321A/B (3)

Fourth Year
One Oceania seminar (PACI 413 or 414) and (1½)
One Southeast Asian seminar
(PACI 425 or 412) (1½)
PACI 490 (3)
Electives: nine additional units of 300-400 level courses (9)

PACIFIC STUDIES COOPERATIVE EDUCATION PROGRAM

The Pacific Studies Cooperative Education Program is administered under the Arts Cooperative Education Program (see Calendar page 41). Entry into this particular program is restricted to students who are enrolled in a Major Program in Pacific Studies. Students undertake their first work term after completion of second year, and are required to complete a minimum of four work terms. To be admitted and to continue in the Pacific Studies Cooperative Education Program, students must maintain a 6.50 average in Pacific and Asian Studies courses, with a 5.00 grade point average overall. A student may withdraw from the program and graduate in the regular Pacific Studies Major Program.

CURRICULUM

Students must fulfill all of the requirements both of the Pacific Studies Major Program and of the Arts Cooperative Education Program. The following points arising from the scheduling of work terms should be noted:

(a) Coop students may take PACI 490 (or CHIN 490 or JAPA 490) either as a 3 unit course or as two 1½ unit courses separated by a work term.
(b) Coop students are encouraged to complete all full year courses as early as possible in their program. Note in particular that most language courses are offered only on a full year basis.

PROGRAM IN CHINESE STUDIES

GENERAL

First Year: 100A/B or 149
Second Year: 200 or 150
Third and Fourth Years: 300 plus six additional units of courses numbered 300 or above related to China and chosen in consultation with the Program Adviser. Students eligible for placement in 420 may count it in place of 300 toward their General program.

PROGRAM IN JAPANESE STUDIES

GENERAL

First Year: 100A/B or 149
Second Year: 200 or 150
Third and Fourth Years: 300 plus six additional units of courses numbered 300 or above related to Japan and chosen in consultation with the Program Adviser.

COURSES

(Course offering codes: Y = Sept.-Apr., F = Sept.-Dec., S = Jan.-Apr., K = May-Aug., NO = Not offered, this session)

CHINESE

Native speakers of Chinese (Mandarin) may not obtain credit for 100A/B, 149, 150, 200, 300, 310, 400 or 480, but may be allowed to take 420 or 490 for credit. A native speaker is defined in this context as a person who has spoken some form of Chinese since childhood and who has received sufficient instruction in Chinese to be literate in the Chinese script. Students who are not native speakers, but who have some knowledge of a form of Chinese other than Mandarin (e.g. Cantonese) will be placed at an appropriate level; however, such students may, at the instructor's discretion, be required to withdraw or to transfer to a higher level course should their language proficiency prove greater than was initially supposed.

CHIN 100A (formerly half of 100) (1½) INTRODUCTION TO CHINESE: I
An introduction to the pronunciation and common speech patterns of Mandarin. Students will learn to understand and speak basic Chinese, to make classroom presentations and dialogues, and to read and write simplified characters. (Not open to students with credit in 149 or its equivalent) F(3-1)

CHIN 100B (formerly half of 100) (1½) INTRODUCTION TO CHINESE: II
A continuation of 100A. By the end of this course students should be able to read and write approximately five hundred Chinese characters. (*Prerequisite:* 100A or permission of the instructor) (Not open to students with credit in 149 or its equivalent) S(3-1)

CHIN 149 (3) INTENSIVE CHINESE: I
This course will offer intensive Chinese language instruction to beginning language students. Students are expected to learn the same basic skills as are developed in 100, but will do so in one term rather than a full academic year. The course prepares students for 150. (Not open to students with credit in 100A and/or 100B)
R. King F(6-2)

CHIN 150 (3) INTENSIVE CHINESE: II
Continuation of 149 for those students who intend to practise their listening comprehension, speaking and reading abilities, and writing skills on a more advanced level. The content of 150 is comparable to that of 200. (*Prerequisite:* normally a minimum final grade of B in 149 or equivalent; limited to 25 students per section) (Not open to students with credit in 200)
R. King S(6-2)

CHIN 200 (3) SECOND YEAR CHINESE
A sequel to 100B. More advanced grammar and idioms, and the introduction of approximately seven hundred additional Chinese characters. (*Prerequisite:* normally a minimum final grade of B in 100B or equivalent; limited to 25 students per section) (Not open to students with credit in 150) Y(3-1)

CHIN 202 (formerly 302) (3) INTRODUCTION TO CHINESE LITERATURE, IN TRANSLATION
A survey of Chinese literature from early times to the end of the 19th century. The emphasis will be on poetry and fiction, but examples of drama and of historical and philosophical prose will be discussed as well. While the course will be concerned chiefly with the literary interest of the works to be discussed, relevant social and historical backgrounds will be introduced as appropriate. (*Prerequisite:* None, the course is open to all students) (This course will be offered every other year) Y(3-0)

CHIN 261 (LING 261) (1½) INTRODUCTION TO THE CHINESE LANGUAGE AND LINGUISTICS
A general introduction to the synchronic and diachronic descriptions of Chinese. Subjects covered may include phonology, morphology, syntax, semantics, historical changes, poetics, dialectology, orthography, the sociolinguistic and psycholinguistic aspects of Chinese, the relationship between the Chinese language, thought, culture, and the history of Chinese linguistics. F(3-0)

CHIN 300 (3) INTERMEDIATE MODERN CHINESE
A sequel to 150 or 200. Reading and translation of texts in modern Chinese in both standard and simplified characters, including introduction of elements of the classical language as used in modern writing. One hour per week devoted to conversation practice. (*Prerequisite:* normally a minimum final grade of B in 150 or 200 or equivalent; limited to 25 students per section) Y(3-1)

CHIN 303A (1½) TOPICS IN CHINESE THOUGHT: LEGALISM
An analysis of selected topics in Legalism, with emphasis on interpretation of controversial issues in Legalist thought. Among the areas to be discussed are: 1) the role of Legalism in Chinese history, 2) current official interpretation of Legalism, 3) Shang Yang's New Law, 4) Shen Pu-hai's Legalism and Taoism, 5) Han Fei Tzu's synthesis of early Legalism, 6) Legal codes in imperial China — the Confucianization of Legalism. This course will be taught in English. (*Prerequisite:* Second year standing or permission of the instructor) NO(3-0)

CHIN 303B (1½) TOPICS IN CHINESE THOUGHT: CONFUCIANISM
An analysis of selected topics in Confucianism, with emphasis on the interpretation of controversial issues in Confucian thought. Among the areas to be discussed are: 1) current official interpretations of Confucianism, 2) the anti-Confucian movement during the May Fourth period, 3) early Confucianism vs. state Confucianism, 4) the cultivation of sagehood in neo-Confucianism, 5) Confucianism and traditional Chinese political culture, 6) contemporary reinterpretation of Confucianism. This course will be taught in English. (*Prerequisite:* Second year standing or permission of the instructor)
H. Hsiao F(3-0)

CHIN 304A (1½) TOPICS IN CHINESE THOUGHT: TAOISM
An analysis of selected topics in Taoist thought and its influence on Chinese culture. Among the areas to be discussed are: 1) the quest for immortality in early Taoism, 2) Taoist folk religion, 3) Taoist monastic life, 4) Taoist influence on literature and arts, 5) Taoist influence on political culture. This course will be taught in English. (*Prerequisite:* Second year standing or permission of the instructor) NO(3-0)

CHIN 304B (1½) TOPICS IN CHINESE THOUGHT: BUDDHISM
An analysis of selected topics in the Buddhist conquest of China and the Chinese transformation of Buddhism. Among the areas to be discussed are: 1) the introduction of foreign Buddhism in terms of native Taoist concepts, 2) resistance against Buddhism in Confucian gentry circles and Buddhist counter arguments, 3) conflict between Buddhism and Taoism, 4) the triumph of Buddhism in the Sui and T'ang dynasties, 5) major schools of Buddhism in China, 6) Buddhism in modern China. This course will be taught in English. (*Prerequisite:* Second year standing or permission of the instructor) NO(3-0)

CHIN 305 (1½) MODERN CHINESE LITERATURE AND SOCIETY (1900-1949)
After a historical overview and a criticism workshop, the course will consist of a study of selected literary texts from late Qing and Republican China. The development of modern Chinese literature will be traced from novels of exposure written at the turn of the century, through the

short stories of the May Fourth period, to works of fiction and drama written in the 1930's and 1940's. There will be supplementary readings in social and political history and literary criticism. The course will be taught in English. (*Prerequisite:* Second year standing or permission of the instructor) (This course, with 306, will be offered every other year)
NO(3-0)

CHIN 306 (1½) THE LITERATURE OF THE PEOPLE'S REPUBLIC OF CHINA (1949 TO THE PRESENT)
A study of Chinese literary texts written in a range of forms and styles during the period of communist rule and covering such important issues as the social position of women, land ownership, modernization of industry, and the treatment of intellectuals. The course will be taught in English. (*Prerequisite:* Second year standing or permission of the instructor) (This course, with 305, will be offered every other year)
NO(3-0)

CHIN 310 (3) INTRODUCTION TO LITERARY CHINESE
Introduction to the grammar of the classical literary language of China; readings from such early writers as the philosopher Mencius, the historian Ssu-ma Ch'ien, and the T'ang poet Wang Wei. (*Prerequisite:* 300 or first class standing in 150 or 200) (Not open to native speakers)
D. Bryant NO(3-0)

CHIN 400 (3) ADVANCED READINGS IN MODERN CHINESE
A sequel to 300. Reading of materials in Modern Chinese at a more advanced level. Opportunity will be provided for practice in conversation. The content of 400 will vary from year to year. (May be taken more than once in different topics with the permission of the Chair of the Department) (Students may not obtain credit for more than 6 units of 400 and 410) (*Prerequisite:* normally a minimum final grade of B in 300 or equivalent; limited to 25 students per section)
H. Hsiao Y(3-0)

CHIN 420 (3) MANDARIN FOR SPEAKERS OF OTHER CHINESE LANGUAGES
This course is intended for literate speakers of non-Mandarin forms of Chinese, such as Cantonese, Hakka, etc. Speaking ability in Mandarin will be developed through the reading and discussion of selected Chinese literary works. There will be periodic translation assignments and one essay during the year. The content of 420 will vary from year to year. (May be taken more than once in different topics with the permission of the Program Adviser of the Department) (Students may not obtain credit for more than 6 units of 420 and 410) (*Prerequisite:* Reading knowledge of Chinese and permission of the instructor)
H. Hsiao Y(3-0)

CHIN 480 (1½ or 3) DIRECTED LANGUAGE STUDY
Intended for exceptional students prepared to undertake specialised language study at an advanced level, this course may be offered as a tutorial or seminar as circumstances warrant. (*Prerequisite:* 400 or permission of the instructor) (Not open to native speakers) Y, F, S

CHIN 490 (1½ or 3) DIRECTED STUDIES
This course will normally involve readings and a research project in a particular area of Chinese Studies in which the student is qualified. The individual program of studies will be supervised by an appropriate faculty member. (May be taken more than once for credit in different topics up to a maximum of 6 units) (Normally open only to students who satisfy the requirements for PACI 490)
Members of the Department Y,F,S

JAPANESE

Native speakers of Japanese may not obtain credit for 100A/B, 149, 150, 200, 300, 400 or 480, but may be allowed to take 490 for credit. A native speaker is defined in this context as a person who has spoken Japanese since childhood and who has received sufficient instruction to be literate in Japanese. Students who are not native speakers, but who do have some knowledge of Japanese, will be placed at an appropriate level; however, such students may, at the instructor's discretion, be required to withdraw or to transfer to a higher level course should their language proficiency prove greater than was initially supposed.

JAPA 100A (formerly half of 100) (1½) INTRODUCTION TO JAPANESE: I
An introductory course in the Japanese language for students with no previous knowledge of the language. Although reading and writing practices are introduced from the beginning of the course, emphasis is on the development of listening comprehension and speaking abilities. (Not open to students with credit in 149 or its equivalent)
Y. France, M.C. Poulton F(3-1)

JAPA 100B (formerly half of 100) (1½) INTRODUCTION TO JAPANESE: II
A continuation of 100A. By the end of this course, students will be able to carry on elementary conversations, and write hiragana, katakana, and approximately one hundred and fifty kanji. (*Prerequisite:* A final grade of B or better in 100A or permission of the instructor) (Not open to students with credit in 149 or its equivalent) S(3-1)

JAPA 149 (3) INTENSIVE JAPANESE: I
This course will offer intensive Japanese language instruction to beginning language students. The course will enable students to develop basic language skills, including listening comprehension, speaking, reading and writing, through lectures, class discussions, tutorials for conversation practice, laboratory sessions, and other activities. It will cover a basic one year study of the Japanese language in one term, and will prepare students for 150. (Not open to students with credit in 100A and/or 100B or equivalent)

JAPA 150 (3) INTENSIVE JAPANESE: II
Continuation of 149 for those students who intend to practise their listening comprehension, speaking and reading abilities, and writing skills on a more advanced level. This course is equivalent to a second year Japanese course, but is very intensive. (*Prerequisite:* normally a minimum final grade of B in 149 or equivalent; limited to 25 students per section) (Not open to students with credit in 200) S(6-2)

JAPA 200 (3) SECOND YEAR JAPANESE
A continuation of 100B for students who wish to develop their practical communicative skills through improving their comprehension, speaking, reading, and writing abilities in Japanese. (*Prerequisite:* normally a minimum final grade of B in 100B or equivalent; limited to 25 students per section) (Not open to students with credit in 150)
Y. France Y(3-1)

JAPA 201A (formerly part of 201) (1½) ASPECTS OF JAPANESE CULTURE: I
A survey of Japan's cultural past from earliest times to the mid nineteenth century. The major trends in Japanese history will be outlined, with emphasis on the outstanding cultural developments of each epoch, especially in the areas of literature, drama, philosophy and religion, and the visual arts. Relevant social backgrounds will also be considered. No knowledge of Japanese language is required. (*Prerequisite:* None, the course is open to all students except those with credit in 201) F(3-0)

JAPA 201B (formerly part of 201) (1½) ASPECTS OF JAPANESE CULTURE: II
A survey of Japanese culture from the mid nineteenth century to the present. Cultural developments will be considered in their historical and social contexts. Aspects of contemporary society, and Japan's position in the world community will be considered. No knowledge of Japanese language is required. (*Prerequisite:* 201A or permission of the instructor. Not open to students with credit in 201) S(3-0)

JAPA 260 (LING 260) (1½) INTRODUCTION TO THE JAPANESE LANGUAGE AND LINGUISTICS
A general introduction to the synchronic and diachronic descriptions of Japanese; subjects covered may include: phonology, morphology, syntax, semantics, historical changes, poetics, dialectology, orthography, the sociolinguistic and psycholinguistic aspects of Japanese, the relationship between Japanese language, thought, and culture, and the history of Japanese linguistics. (Previous knowledge of Japanese not necessary)
H. Noro S(3-0)

JAPA 300 (3) THIRD YEAR JAPANESE
A course designed to improve students' mastery of the spoken and

written language. Classes offer practice in listening comprehension, conversation, reading, translation, and composition. (*Prerequisite:* normally a minimum final grade of B in 150 or 200 or equivalent; limited to 25 students per section)
N. Riddington Y(3-0-1)

JAPA 302A (formerly part of 302) (1½) JAPANESE LITERATURE IN TRANSLATION: FROM EARLIEST TIMES TO 1185
A survey, through material in English translation, of Japanese literature from its earliest beginnigns to the end of the artistocratic period. Emphasis will be on poetry, literary diaries, and narrative fiction, with considerable attention to *The Tale of Genji.* Where appropriate, relevant social and historical backgrounds will be examined. (*Prerequisite:* Second year standing or permission of the instructor) NO(3-0)

JAPA 302B (formerly part of 302) (1½) JAPANESE LITERATURE IN TRANSLATION: THE MIDDLE AGES AND THE EARLY MODERN PERIOD (1185-1867)
A survey, through selected English translations, of Japanese literature from the founding of the Kamakura Shogunate to the eve of the Meiji Restoration. Major literary trends will be examined, including linked verse and haiku poetry, No drama and the kabuki and puppet theatres, warrior tales and popular fiction. (*Prerequisite:* Second year standing or permission of the instructor) NO(3-0)

JAPA 303A (formerly part of 303) (1½) MODERN JAPANESE LITERATURE IN TRANSLATION: FROM 1868 to 1926
A survey, through selected English translations, of Japanese literature from the Meiji (1868-1912) and Taisho (1912-1926) eras. The course will focus on readings of works by Natsume Soseki, Mori Ogai, and other novelists, poets and playwrights. (*Prerequisite:* second year standing or permission of the instructor)
M.C. Poulton F(3-0)

JAPA 303B (formerly part of 303) (1½) MODERN JAPANESE LITERATURE IN TRANSLATION: FROM 1926 TO THE PRESENT DAY
This course covers the literature of the turbulent Showa era (1926-1989). Most of the readings will be novels and short stories, and will include works by Kawabata, Tanizaki, and Mishima. (*Prerequisite:* second year standing of permission of the instructor)
M.C. Poulton S(3-0)

JAPA 320A (THEA 312) (1½) SEMINAR IN JAPANESE THEATRE AND DRAMA: FROM EARLIEST TIMES TO 1500
This course will study early Japanese drama and theatre from its roots in folk and ritual performance. A majority of time will be spent on the study of No drama and the theoretical writings of Zeami, to be read in translation. This will be supplemented by film, video and audio recordings of theatrical productions. A variety of approaches will be taken in class, including discussion of the plays as literary texts, dramaturgy, staging and performance techniques. (*Prerequisite:* second year standing or permission of the instructor)
M.C. Poulton F(3-0)

JAPA 320B (THEA 313) (1½) SEMINAR IN JAPANESE THEATRE AND DRAMA: FROM 1500 TO THE PRESENT DAY
This course will focus on Bunraku and Kabuki, but some reading and study will also be made of developments in 20th century theatre. Readings of plays in translation will be supplemented by screenings of videos and films of stage performances. (*Prerequisite:* second year standing or permission of the instructor)
M.C. Poulton S(3-0)

JAPA 358 (1½ or 3) TOPICS IN JAPANESE LANGUAGE, LITERATURE, AND CULTURE
This seminar will examine selected topics related to Japanese language, literature, or cultural studies. Topic and instructor will vary from year to year. (May be taken more than once for credit in different topics up to a maximum of 9 units) (*Prerequisite:* Will vary according to the topic; prospective students should consult with the instructor or with the Program Adviser) NO(3-0)

JAPA 396 (LING 396) (1½) SOCIOLINGUISTIC ISSUES IN JAPANESE
An examination of the Japanese language in its social context. A wide range of sociolinguistic topics will be covered, including non-verbal communication and types of Japanese spoken outside of Japan. Attention will be given to linguistic, dialectal, and stylistic variation in speech communities, and to sociolinguistic considerations such as class, gender, and social setting. (3-0)

JAPA 400 (3) READINGS IN MODERN JAPANESE PROSE
A series of readings in modern Japanese, designed to broaden the students' acquaintance with the Japanese writing system, expand their working vocabulary, and give a firmer grounding to their general knowledge of the language. The content will vary from year to year. (May be taken more than once in different topics to a maximum of 6 units with the permission of the Program Adviser) (*Prerequisite:* normally a minimum final grade of B in 300 or equivalent; limited to 25 students per section)
B.M. Young Y(3-0)

JAPA 480 (1½ or 3) DIRECTED LANGUAGE STUDY
Intended for exceptional students prepared to undertake specialised language study at an advanced level, this course may be offered as a tutorial or seminar as circumstances warrant. (*Prerequisite:* 400 or permission of the instructor) (Not open to native speakers) Y, F, S

JAPA 490 (1½ or 3) DIRECTED STUDIES
This course will normally involve readings and a research project in a particular area of Japanese Studies in which the student is qualified. The individual program of studies will be supervised by an appropriate faculty member. (May be taken more than once for credit in different topics up to a maximum of 6 units) (Normally open only to students who satisfy the requirements for PACI 490)
Members of the Department Y,F,S

PACIFIC STUDIES

PACI 200 (3) CULTURAL CONTACT AND SOCIAL CHANGE IN THE PACIFIC REGION
This is an interdisciplinary course serving as an introduction to the political, social and economic development of the Pacific Region from about 1500 to the present. Using selected case studies as illustrations, it depicts the causes, processes and effects of contact between the West on the one hand and the Far East, Southeast Asia and Oceania on the other. It includes such topics as prewar colonial activities, anticolonial movements and decolonization processes in the postwar era and the present economic and political relationships in the Pacific region; trans-Pacific migrations; ethnic relations; modernization and cultural change in the Pacific Region.
R.C. Morgan Y(3-0)

PACI 253 (formerly half of 252) (HIST 253) (1½) INTRODUCTION TO CHINESE CIVILIZATION
The purpose of this course is to introduce the student to the traditional civilizations of China and Japan. Though a survey of many thousands of years in so short a space in time must of necessity be selective, the course will consider topics in political, social, intellectual, and economic history of the civilization. (This course is a prerequisite to 433A and 433B.) F(3-0)

PACI 254 (HIST 254) (1½) CHINA AND THE WEST
An introductory survey of modern Chinese history with particular emphasis on China's relations with the West. The period covered will be from the 17th century but most emphasis will be on the last 150 years. (This course is a prerequisite for all upper level courses in modern Chinese history.)
R. Croizier F(3-0)

PACI 255 (formerly half of 252) (HIST 255) (1½) INTRODUCTION TO JAPANESE CIVILIZATION BEFORE THE 19TH CENTURY
The purpose of this course is to introduce the student to the traditional civilization of Japan from earliest times to the end of the 18th century. Topics in political times to the end of the 18th century. Topics in political, social, intellectual, cultural and economic history will be considered. (This course is a prerequisite to 435.)
E.P. Tsurumi F(3-0)

PACI 256 (HIST 256) (1½) INTRODUCTION TO MODERN JAPAN
A survey of modern Japanese history from the 18th century to the present. After a review of the last century of "traditional Japan," the country's transformation to a modern state will be examined. The last section of the course will deal with the post 1945 period. (This course is a prerequisite for all upper level courses in modern Japanese history.)
E.P. Tsurumi S(3-0)

PACI 290 (formerly 311) (1½) INTRODUCTION TO THEORY AND RESEARCH METHODS FOR PACIFIC STUDIES
An interdisciplinary introduction to methods and approaches used by various schools of analysis as applied to problems in the study of China, Japan, Southeast Asia, and Oceania. Course involves student participation in discussion sessions and oral presentations as well as written work. This course is required for all majors and should be taken in the second year. (*Pre- or corequisite:* 200 (formerly 300)) F(3-0)

PACI 319A (formerly 319) (1½) SOCIAL STRUCTURE AND SOCIAL CHANGE IN CHINA
This course attempts to provide interpretations for the "development of underdevelopment" of China: the various structural, cultural as well as external barriers obstructing China's various attempts to modernize and industrialize in the 19th and early 20th centuries. It also examines the counter culture of China in the form of secret societies and peasant movements which paved the way for the triumph of Mao in 1949. (*Prerequisite:* 200 (or 300); *pre- or corequisite:* 290 (or 311) or equivalent)
Y.F. Woon F(3-0)

PACI 319B (formerly 419) (1½) MODERN CHINESE SOCIETY
This course traces the various attempts by China at economic development and socialist transformation since 1949. Particular emphasis will be placed on the impact of these policies on village life and the response of rural inhabitants in China. (*Prerequisites:* 200 (or 300), 290 (or 311) or equivalent, 319A)
Y.F. Woon S(3-0)

PACI 321A (formerly 321) (1½) SOCIAL STRUCTURE AND SOCIAL CHANGE IN JAPAN
This course will concentrate upon the transformation of Japanese society from the early 19th century up to the end of World War II, paying particular attention to the interlocking themes of economic development and political and social change. (*Prerequisite:* 200 (or 300); *pre- or corequisite:* 290 (or 311) or equivalent)
J.B. Moore F(3-0)

PACI 321B (formerly 421) (1½) MODERN JAPANESE SOCIETY
A consideration of Japan's re-emergence as an industrialized nation in the postwar period and prospects for further development in view of the world energy crisis, environmental degradation, and other domestic and foreign problems. Emphasis will be upon the socio-political effects of Japan's postwar economic transformation. (*Prerequisites:* 200 (or 300), 290 (or 311) or equivalent, 321A)
J.B. Moore NO(3-0)

PACI 322 (ECON 322) (1½) ECONOMIC DEVELOPMENT OF JAPAN
This is a course in the economic development of Japan principally concentrating on the 20th century. The first half of the course deals with the Tokugawa economy, the transition into the Meiji period and the interwar economy. The second half deals with the postwar period, especially with the era of high speed growth although there is also discussion of the developments after the oil crisis of 1973-4. Topics include savings and investment, trade, importing and adapting foreign technology, government policies and labour. (*Prerequisite:* 200 or permission of the Pacific and Asian Studies Department; ECON 100 or 201/202, or permission of the Economics Department)
C. Mosk S(3-0)

PACI 323A (formerly 323) (1½) SOUTHEAST ASIA FROM 1800 TO 1945
This course will focus on the transformation of Southeast Asia under the impact of Western imperialism from a multiplicity of political centers and circles of influence into nations with new structures and boundaries. It will focus on such themes as the nature of colonial rule, the introduction of capitalism, the rise of independence movements, and changes in rural society. (*Prerequisite:* 200 (or 300); *pre- or corequisite:* 290 (or 311) or equivalent)
R.C. Morgan F(3-0)

PACI 323B (formerly 423) (1½) POSTWAR SOUTHEAST ASIA
This course will examine the postwar experiences of four Southeast Asian countries — Indonesia, Malaysia, the Philippines, and Vietnam. Major themes will be decolonization and the rise of independent states, the composition of elites, problems of liberal democracy, revolutionary movements, class and ethnic divisions, economic development, and the role of the military. (*Prerequisites:* 200 (or 300); 290 (or 311) or equivalent, 323A)
TBA S(3-0)

PACI 324 (ECON 324) (1½) ECONOMIC DEVELOPMENT IN SOUTHEAST ASIA
Economic performance and economic institutions of countries in Southeast Asia with special reference to Indonesia, Malaysia, the Philippines, and Thailand; focus will be mainly on current issues and on international economic relations of the region with the rest of Asia and with North America. (*Prerequisite:* 200; or permission of the Pacific and Asian Studies Department; and ECON 100 or 201, or permission of the Economics Department) F(3-0)

PACI 328A (1½) SOCIAL STRUCTURE AND SOCIAL CHANGE IN OCEANIA
This course examines the experience of the Polynesian, Micronesian and Melanesian societies, from Hawaii to Papua-New Guinea, up to the "compromise" phase of the early 20th century. Emphasis is given to understanding how local, regional, and international factors combined to shape the cultural and institutional forms with which Oceanic people entered the modern period. (*Prerequisite:* 200 (or 300); *pre- or corequisite:* 290 (or 311) or equivalent)
R.C. Morgan F(3-0)

PACI 328B (1½) CONTEMPORARY OCEANIA: SOCIETY AND POLITICS
A study of political systems and social change in the Pacific Islands countries of Tonga, Fiji, Samoa, Cook Islands, French Polynesia, Vanuatu, Solomons and Papua-New Guinea, from the mid-20th century to the present day. The theme of "development, change and persistence" will be examined. Practical information on government and social issues will be developed. Where appropriate, attention will be given to Canada's existing and potential relations to the area. (*Prerequisite:* 200 (or 300), 290 (or 311) or equivalent, 328A)
R.C. Morgan S(3-0)

PACI 359 (H A 359) (1½) ISLAMIC ART AND ARCHITECTURE IN SOUTHEAST ASIA
A survey of the major architectural and artistic achievements of Islamic civilization in the Far East and Southeast Asia from the 16th century to the present day. Emphasis will be on the social, religious, and cultural impact of Islam on the arts and the subsequent development of a distinctive Islamic tradition in this region. NO(3-0)

PACI 364 (LING 364) (1½) LANGUAGES IN THE PACIFIC AREA
A survey of languages spoken on the islands of the Pacific Ocean (Indonesia, Philippines, Melanesia, Micronesia and Polynesia), their genetic relationships and area groupings; specific languages and families are selected for more detailed discussion, illustrating issues of relevance to linguistic theory and analysis, applied linguistics and sociolinguistics. (*Prerequisite:* None; LING 100B recommended)
NO(3-0)

PACI 365 (LING 365) (1½) SEMINAR ON A PACIFIC AREA LANGUAGE: STRUCTURE, CONTEXT AND USAGE
This course deals each time with a different specific language spoken in Pacific Asia (except for Mandarin Chinese and Japanese) and on the Pacific Islands. Topics covered include phonological and grammatical structure, genetic relationships to others of its family, social and cultural

context, political importance, use in the mass media and education, literature in the language, and the problems of language policy and planning. The language considered in a given term may be Korean, Tagalog, Chamorro, Palauan, Ainu, Tongan, Hawaiian, Samoan, Cantonese, Fijian, pidgin English and so on. May be repeated for credit up to a maximum of six units. (*Prerequisite:* LING 100B or PACI/LING 364) NO(3-0)

PACI 371 (H A 371) (1½) EARLY CHINESE ART

An introductory survey of Chinese art from the Neolithic period through the Tang dynasty. Topics include the ritual vessels of the Bronze age, the impact of the Indian religion of Buddhism on Chinese arts, the rise of landscape painting, and the classic era of figure painting. Chinese histories and theories of the arts will be read in translation.
K. Liscomb F(3-0)

PACI 372 (H A 372) (1½) LATER CHINESE ART

An introductory survey of Chinese art from the Five Dynasties era through the Ch'ing dynasty. The emphasis will be on the various genres and styles of painting, and on the role of the educated elite as painters, patrons, critics and theorists. Other topics include later Chinese sculpture and ceramics. (Students should have completed HA 371 or the equivalent)
K. Liscomb S(3-0)

PACI 373 (H A 373) (1½) EARLY JAPANESE ART

An introductory survey of Japanese art which traces the history of Japan's absorption and transformation of continental (Chinese and Korean) influences from prehistoric times through the Kamakura period. The emphasis is on Buddhist arts and the rise of the long narrative handscrolls known as *emakimono* during the Heian and Kamakura periods. NO(3-0)

PACI 374 (H A 374) (1½) LATER JAPANESE ART

An introductory survey of Japanese art from the Muromachi through the Edo periods. The emphasis is on the impact of Zen Buddhism on several art forms; the new castles with their paintings on sliding doors and folding screens; and the various schools of painting and printmaking active during the Edo period, an era during which revivals of native styles flourished along side experiments inspired by Chinese and Western art. (Students should have completed HA 373 or the equivalent) NO(3-0)

PACI 412 (1½) SEMINAR IN SOUTHEAST ASIAN STUDIES

A detailed analysis of socio-economic problems in Southeast Asia. Extensive class participation including presentation of seminar papers will be required. Details of topics to be covered can be obtained from the Instructor prior to registration. (*Prerequisite:* 200 (or 300), 290 (or 311) or equivalent, 323A and 323B)
TBA S(3-0)

PACI 413 (1½) TOPICS IN AUSTRALASIA AND/OR PACIFIC ISLAND STUDIES

An intensive study of selected major issues and topics in Australasia and/or the Pacific Islands. Students should consult the Program Adviser for details of the topics to be covered. (*Prerequisite:* 200 (or 300), 290 (or 311) or equivalent, 328A or 328B) NO

PACI 414 (1½) SEMINAR IN OCEANIC STUDIES

A detailed analysis of theoretical questions on Oceania. A research paper with seminar presentation of results is required. Students should consult the Instructor on specific topics. (*Prerequisites:* 200 (or 300), 290 (or 311) or equivalent, 328A and 328B)
R.C. Morgan S(3-0)

PACI 415 (1½) SEMINAR ON CANADA AND THE PACIFIC

An examination of selected topics concerning Canada's relations with countries in the Pacific region. Topic and area will vary from year to year. (May be taken more than once for credit in different topics and areas up to a maximum of 3 units) (*Prerequisites:* 200 (formerly 300), 290 (formerly 311); additional third year Pacific Studies course sequence in relevant areas; prospective students should consult with the instructor or with the Program Adviser) (3-0)

PACI 417 (1½) SEMINAR IN TAIWANESE STUDIES

An extensive study of selected major issues in 20th century Taiwan. Major themes will be problems of liberal democracy and revolutionary movements, evaluation of the "economic miracle," emergence of nationalism, and prospects for Sino-Taiwanese relations. (*Prerequisites:* 200 (or 300), 290 (or 311) or equivalent, 319A, 319B)
H. Hsiao S(3-0)

PACI 420 (1½) SEMINAR ON SOCIAL CONTINUITY AND SOCIAL CHANGE IN CHINA

This seminar will explore selected aspects of modern and premodern China, focussing on the theme of social continuity and change as China moves from a Confucian state, through the Nationalist period, to a socialist state. Oral presentations, written papers and participation in class discussion are required throughout the course. (*Prerequisites:* 200 (or 300), 290 (or 311) or equivalent, 319A and 319B) (3-0)

PACI 422 (1½) SEMINAR ON POSTWAR JAPAN

A close examination of a major issue on postwar Japan such as the Allied Occupation, the evolution of the labour movement, the postwar political economy, or Japan in the international division of labour. Consult instructor for specific topic. (*Prerequisite:* 200 (formerly 300), 290 (formerly 311) or equivalent, 321A and 321B)
J.B. Moore NO(3-0)

PACI 425 (formerly 312) (1½) SEMINAR ON MINORITY PROBLEMS AND THE STATE IN SOUTHEAST ASIA

Using ethnic relations in Southeast Asian societies as case studies, this course questions the applicability of the "melting pot" theory to developing nations. It looks at minority problems in Southeast Asia as manifestations of power struggles between pressure groups and authority. Students are required to present seminar papers on ethnic problems in Southeast Asia. (*Prerequisites:* 200 (or 300), 290 (or 311) or equivalent, 323A and 323B)
Y.F. Woon F(3-0)

PACI 433A (HIST 433A) (1½) ANCIENT CHINA

A study of the rise of Chinese civilization and Empire from the earliest times to approximately 200 A.D. Major themes will be the origins of Chinese civilization, the flowering of Chinese philosophy in the times of Confucius and Lao-tzu, the formation of a unified Empire, and the social foundations of the Imperial State. (*Prerequisites:* 253 or permission of the instructor) NO(3-0)

PACI 433B (HIST 433B) (1½) PRE-MODERN CHINA

The development of Chinese civilization from the fall of the Han Empire in the third century A.D., through the reunification of China under the Tang, to the Manchu Conquest of China in 1644. Major attention will be given to the political and social dynamics of the Imperial State and to the cultural basis of Chinese civilization. (*Prerequisites:* 253 or permission of the instructor) NO(3-0)

PACI 434A (HIST 434A) (1½) CHINA IN REVOLUTION

China's encounter with the modern West from the 17th century to the mid 20th century. Emphasis on the collapse of the traditional order and the search for new political, social, and cultural forms. (*Prerequisite:* 254 or permission of the instructor)
R. Croizier F(3-0)

PACI 434B (HIST 434B) (1½) CHINESE COMMUNISM

The roots of Chinese Communism and the successful implementation of a peasant-based revolution. Mao Zedong's efforts to create a radically egalitarian society after 1949; the reactions against Maoism after 1976; and China's search for a new strategy of modernization. (*Prerequisite:* 254 or permission of the instructor) (3-0)

PACI 435 (HIST 435) (1½) FEUDALISM IN JAPAN: THE WAY OF THE WARRIOR FROM THE 12TH TO THE 19TH CENTURY

A study of politics, economics, society and culture in medieval and Tokugawa Japan with emphasis upon the role of the samurai class. (*Prerequisite:* 255 or permission of the instructor) NO(3-0)

PACI 436A (HIST 436A) (1½) JAPAN'S MODERN TRANSFORMATION: FROM FEUDAL COUNTRY TO NATION-STATE
An examination of a rapidly changing Japan from the time of the "opening" of the country by the Western powers in the middle of the 19th century to the time of the Pacific War and its aftermath in the middle of the 20th century. The format requires student participation such as oral presentations, written papers, and class discussion throughout the course. (*Prerequisite:* 256)
E.P. Tsurumi F(3-0)

PACI 436B (HIST 436B) (1½) 20TH CENTURY JAPAN
A study of modern Japanese society and culture in the 20th century. Special attention will be paid to the influences of Westernization and industrialization upon traditional modes of thought, work, everyday life and creative endeavours. Changes in family life in the cities and in the countryside will be examined. (*Prerequisite:* 256) NO(3-0)

PACI 437 (HIST 437) (1½) JAPANESE WOMEN FROM THE 6TH TO THE 20TH CENTURY
A study of the history of Japanese women from the time of the ancient communities, through the golden age of classical literature, different phases of Japanese feudalism, disruptions and continuities of the post-1868 nation. The format requires student participation such as oral presentations, written papers, and class discussion throughout the course. (Not open for credit to students who have studied this topic under 438) E.P. Tsurumi F(3-0)

PACI 438 (HIST 438) (1½ or 3) TOPICS IN EAST ASIAN HISTORY
An intensive study of selected aspects of East Asian history. (Students are advised to consult the Department for information regarding the subjects to be considered. May be taken for credit more than once in different topics with permission of the Chair of the Department) (*Prerequisite:* Relevant course work and permission of the instructor)
"Japanese History and Film"
E.P. Tsurumi S(3-0)

PACI 439 (HIST 439) (1½ or 3) SEMINAR IN EAST ASIAN HISTORY
Selected topics in East Asian history. (Enrollment limited. Priority in registration given to honours and major students in history, but others may be admitted with consent of instructor. Students are advised to consult the Department about the topics to be considered.) (May be taken more than once in different topics with permission of the Chair of the Department) (*Prerequisite:* Relevant course work and permission of the instructor)
"The 11th Century Japanese Court: Women's Diaries" (380)
E.P. Tsurumi S(3-0)

PACI 442 (GEOG 442) (1½) GEOGRAPHY OF CHINATOWNS AND CHINESE MIGRATION
This seminar studies the urban overseas Chinese communities in the Pacific Rim countries. Major topics of discussion will include migration theory, concept of culture conflict, assimilation and acculturation, urban ethnicity, home environment of Chinese emigrants, attitudes and policies of host society towards Chinese immigrants and imprints of Chinese culture on the urban landscape of the receiving country. Emphasis will be placed on the Chinese migration to Canada and the study of the urban problems of Canadian Chinatowns.
C.-Y. Lai S(3-0)

PACI 447 (GEOG 447) (1½) URBAN PROBLEMS OF PACIFIC RIM DEVELOPING COUNTRIES
The course examines the fundamental differences between urban organization in developed and developing countries, and studies the political, cultural and socioeconomic conditions under which cities in Pacific Rim developing countries are growing. (*Prerequisite:* GEOG 349 or permission) NO(3-0)

PACI 475 (H A 475) (1½ or 3) THE ART AND ARCHITECTURE OF SOUTHEAST ASIA
An examination of the sculpture and architecture of Southeast Asia of the precolonial periods, with emphasis on those of Cambodia and Indonesia; these works will be studied within their religious, social and political contexts. Y(3-0)

PACI 490 (1½ or 3) DIRECTED STUDIES
This will normally involve readings and a research project in a particular area of Pacific Studies in which the student is qualified. The individual program of studies will be supervised by an appropriate faculty member in consultation with the Coordinator. (May be taken more than once in different topics with the permission of the Program Adviser of the Department, up to a maximum of 6 units) (Normally open to Major students only) (*Prerequisites:* 200 (Formerly 300), 290 (or 311), and 3 units of upper level courses in the geographical area on which the proposed project will focus)
Y.F. Woon

DEPARTMENT OF PHILOSOPHY

Jeffrey E. Foss, B.A. (Alta.), M.A., Ph.D. (W. Ont.), Associate Professor and Chair of the Department
Rodger G. Beehler, B.A. (Man.), B.Phil. (Oxon.), Ph.D. (Calg.), Professor
Charles B. Daniels, A.B. (Chic.), D. Phil. (Oxon.), Professor
Eike-Henner W. Kluge, B.A. (Calg.), A.M., Ph.D. (Mich.), Professor
Charles G. Morgan, B.S. (Memphis St.), M.S., Ph.D. (Johns H.), M.Sc. (Alta.), M.Sc. (U. of Vic.), Professor
Alan R. Drengson, B.A., M.A. (Wash.), Ph.D. (Ore), Associate Professor
Monika Langer, B.A., M.A., Ph.D. (Tor.), Associate Professor
John M. Michelsen, B.A., M.A., Ph.D. (Wash.), Associate Professor
James O. Young, B.A. (S. Fraser), M.A. (Wat.), Ph.D. (Bost.), Assistant Professor

Visiting and Adjunct Appointments:
Bruce Baugh, B.A., M.A. (Brit. Col.), Ph.D. (Tor.), Visiting Assistant Professor (1990-91)
Bruce Wardhaugh, B.A. (Albion Coll.), M.A., Ph.D. (Tor.), Visiting Assistant Professor (1990-91)

GRADUATE PROGRAM

For information on studies leading to the M.A. degree, see page 279.

GENERAL, MAJOR AND HONOURS PROGRAMS

General — 9 units of courses in Philosophy numbered 300 or above with all prerequisites satisfied.

Major — 21 units of courses in Philosophy comprising:

(a) Introduction to Philosophy (100)
(b) *either* Applied Logic: I (201) and Applied Logic: II (203) *or* Theoretical Logic (304A and 304B)
(c) Moral Philosophy (302)
(d) *either* The Rationalists (306) *or* The Empiricists and Kant (310)
(e) Plato (421) *and* Artistotle (422)
(f) 6 additional units in philosophy courses numbered 300 or higher.

NOTE: Although not required, students are encouraged to include at least one of the following: Existentialism (211), Philosophy of Religion (214), Introduction To Philosophy of Science (220), Aesthetics (242), and Medieval Philosophy (245).

Honours — 30 units in courses in Philosophy comprising:

(a) Introduction to Philosophy (100)
(b) *either* Applied Logic: I (201) and Applied Logic: II (203) *or* Theoretical Logic (304A and 304B)
(c) Moral Philosophy (302)
(d) The Rationalists (306)
(e) The Empiricists and Kant (310)
(f) Plato (421) *and* Aristotle (422)

(g) 12 additional units in philosophy of which at least 6 must be in courses numbered 300 or higher.

NOTE: To obtain a First Class Honours degree it is required that a student have (1) a graduating average of 6.50 or higher, (2) at least a first class average of 6.50 in all credit courses taken in Philosophy, and (3) at least a 7.00 average in all upper level courses completed in fulfillment of the minimum requirement of the honours program in philosophy. Upon completing the program, any student who meets requirement (1), but not (2) or (3), has the option of graduating with a first Class Major degree instead of with a Second Class Honours degree. To obtain a Second Class Honours degree, a student must have at least a 3.50 graduating average and have at least a 5.00 average in all credit courses taken in Philosophy.

UNDERGRADUATE COURSES

NOTE: Courses in the 100 series are broader in scope than those in the 200 series, but neither type should present any difficulty for the beginner. Both types are recommended for students in any program whether they plan to continue in Philosophy or not, and may be taken in any year; *e.g. courses in the 200 series may be taken in the first as well as in later years.* Other courses in Philosophy may be taken by satisfying the listed prerequisites or with permission of the Instructor.

Fuller information on each course will be issued by the Department. This will include the reading required and the name of the Instructor. Students are advised to ask the Department for copies of the annual Departmental handbook prior to registration. Not all courses will be offered every year. To meet the requirements for a Major or Honours program in the minimum number of years, students should plan accordingly.

(Course offering codes: Y = Sept.-Apr., F = Sept.-Dec., S = Jan.-Apr., K = May-Aug., NO = Not offered, this session)

PHIL 100 (3) INTRODUCTION TO PHILOSOPHY
A beginner's investigation of questions which govern attitudes towards life such as: Can the unjust person be happy? Is what is right simply a matter of opinion? Does God exist? Is anything certainly true? The course will include a first hand study of major philosophers, and, consequently, of some of the more original contributions to our intellectual heritage. But the overriding concern is to teach the student how to respond in a coordinated, controlled, and critical way to the sorts of question which these philosophers have raised or provided. (NOTE: This is a multisectioned course, one section of which is sometimes offered entirely in one term with 6 lecture hours per week.) Typical readings are from such texts as Plato's *Republic*, Aristotle's *Nicomachean Ethics*, Descartes' *Meditations*, Spinoza's *Ethics*, Berkeley's *Three Dialogues Between Hylas and Philonous*, Hume's *Dialogues Concerning Natural Religion*, Nietzsche's *Beyond Good and Evil*, Mill's *On Liberty*, Ryle's *Dilemmas*, and more recent writing. But problems, types of approach, and texts vary from section to section.)
A.R. Drengson, E.-H.W. Kluge, J.O. Young Y(3-0)

PHIL 201 (1½) APPLIED LOGIC: I
The course is primarily concerned with the analysis of simple argument forms in natural language. Close attention is paid to the different uses of language in an argumentative context. There is a treatment of elementary principles of inductive logic, decision making, syllogistic reasoning, and informal fallacies. (The course is designed as a first course in logic for students with little or no symbolic orientation; it may be taken before or after 203. 304 is recommended for science students.)
C.G. Morgan F(3-0)

PHIL 203 (1½) APPLIED LOGIC: II
The course is designed to teach students to generate deductively valid arguments and to detect invalid arguments. Correct inference rules for sentential arguments and quantificational arguments are identified and treated from a purely syntactical point of view. A rigorous treatment of the semantic theory for sentential logic and quantification logic is also presented. (The course is designed as a first course in logic for students with little or no symbolic orientation; it may be taken before or after 201. 304 is recommended for science students.)
C.G. Morgan S(3-0)

PHIL 211 (1½, formerly 3) INTRODUCTION TO EXISTENTIALISM
An introduction to the themes and method of existentialism. The course will survey the writings of a number of existentialists, including representative literary works. Questions such as the following will be addressed: Can the individual realize an authentic form of existence in a technological society dedicated to the ideals of comfort, efficiency, and security? Why have existentialists been so vehemently attacked and how have they responded? Is existentialism compatible with Marxism, or are the two irreconcilable? The figures and works chosen may vary from year to year.
M. Langer F(3-0)

PHIL 214 (1½) PHILOSOPHY OF RELIGION
A consideration of some of the conclusions that have emerged from a philosophical examination of such religious questions as: the existence of God, survival of death, the problem of evil, the significance of religious ignorance, etc. Class discussion will be much emphasized.
A.R. Drengson F(3-0)

***PHIL 220 (1½) INTRODUCTION TO PHILOSOPHY OF SCIENCE**
This course will introduce both the epistemological and ethical issues concerning science as a method of gaining knowledge about the world. Epistemological issues may include the distinction between science and non-science, the logic of explanation, and the logic of confirmation. Ethical issues may include the ethics of experimentation with humans, animals, or the environment; the social consequences of scientific knowledge or technology; and the community control of research. (NOTE: Not open to students with credit in 222A or 222B.)
J.E. Foss S(3-0)

PHIL 232 (1½) MORAL PROBLEMS OF CONTEMPORARY SOCIETY
An investigation of certain moral problems which might be called social problems as well. One or more of such topics as the following will be discussed: sexual relations, censorship, suicide; capital punishment; poverty; international hostilities. Differing moral positions concerning the issue(s) chosen will be identified, and their justifications sought out and examined. Students should consult the annual departmental handbook for a more specific description of the course for a given year.
C.B. Daniels F(3-0)

PHIL 233 (1½) PHILOSOPHY OF EDUCATION
A philosophical inquiry into education. Among the questions to be asked are: What are we seeking to do in educating people? What sort of difference is education supposed to bring about in individuals, and in society? How does educating persons differ from indoctrinating them? Is it the purpose of education to qualify people for employment? Is education essentially a conservative force in society? Does it corrupt or liberate?
R.G. Beehler F(3-0)

PHIL 235 (1½) ETHICS OF VIOLENCE AND WAR
An investigation of the ethical issues attending violent political protest or revolt, military action in a nuclear age, and terrorism for political or other ends. S(3-0)

PHIL 238 (1½, formerly 3) PHILOSOPHY IN LITERATURE
The purpose of this course is to explore various philosophical theories and themes as these find expression in literature. In some years the course may be devoted to an examination of a single theme as it emerges in distinct periods and writings. Readings may range over the literature of many countries and will not necessarily be confined to works in the Western tradition.
M. Langer S(3-0)

PHIL 242 (3) AESTHETICS
This course is an introductory examination of such basic philosophical problems of aesthetics as: What is a work of art? Do works of music differ from each other in much the same way as works in the plastic arts differ from each other? What role, if any, does consideration of emotions and intentions legitimately play in evaluation of a work of art? How does forgery differ from plagiarism? Time will be devoted to the discussion of the philosophical problems particular to each major art form, as well as to problems arising from comparison between these art forms.
J.O. Young Y(3-0)

PHIL 245 (3) MEDIEVAL PHILOSOPHY
The purpose of this course is to give the student some insight into the depth and richness of the philosophical, religious and political thought of the middle ages, and to convey an appreciation of the complexity and sophistication of medieval intellectual endeavour. Since Western thought was heavily influenced by Islamic philosophies and by mystical speculations, a special section of the course will be devoted to the philosophy of Islam and its impact on the West, and another to an examination of medieval mysticism.
E.-H.W. Kluge Y(3-0)

PHIL 269 (3) THE SELF, SOCIETY AND CONTEMPORARY CRITICAL THOUGHT
An introductory philosophical investigation of the assumptions behind, and the arguments advanced by, selected contemporary writings of influence. The writings chosen for examination may vary from year to year, but in each case will address fundamental questions about contemporary social life, and the implications of that life for human well-being. The majority of writings will be drawn from disciplines other than philosophy, and one example of a kind of question that might be raised by one or more of the works selected is: upon what does a person's conception of him- or herself depend, and how far is this conception sensitive to the way other persons appreciate, or treat, him or her?
NO(3-0)

PHIL 287 (3) EASTERN PHILOSOPHY
An introductory study of the major philosophic traditions of the East: Confucian, Taoist, Buddhist and Hindu; with comparisons made between Eastern and Western philosophies. Among the topics discussed are major teachings about mysticism; the divine; the unified self; the nature of the cosmos; and the right way to live. An effort will be made to illustrate the methods of philosophizing characteristic of the philosophers discussed. Texts: Readings include the *Tao Te Ching, The Analects, The Upanishads*, and others. NO(3-0)

PHIL 302 (3) MORAL PHILOSOPHY
An inquiry into the foundation of moral reasoning and moral judgement, to be conducted by intensive study of selected seminal writings in moral philosophy. (*Prerequisite:* 6 units of philosophy or written permission of the instructor)
R. Beehler Y(3-0)

PHIL 304A (1½) THEORETICAL LOGIC: I
The course is primarily concerned with a treatment and justification of propositional logic from a theoretical point of view. Ideal formal languages will be developed, and their relationship to natural languages will be discussed. Syntactic and semantic theories will be formalized for the analysis of complex deductive arguments. The metatheory of propositional logic, relating the syntactic theories and the semantic theories, will be developed in detail. Topics to be formally treated include consistency, compactness, soundness, completeness and interpolation. (The course is designed as a first course in logic for students with a symbolic orientation; it may also be taken as a further course in logic following 201 and/or 203. 304 is recommended for science students.) (*Prerequisite:* None)
C.G. Morgan F(3-0)

PHIL 304B (1½) THEORETICAL LOGIC: II
The course is a continuation of Philosophy 304A and is concerned with a treatment and justification of quantificational logic from a theoretical point of view. Ideal formal languages will be developed, and their relationship to natural languages will be discussed. Syntactic and semantic theories will be formalized for the analysis of complex deductive arguments. The metatheory of quantificational logic, relating the syntactic theories and the semantic theories, will be developed in detail. Topics to be formally treated include consistency, compactness, soundness, completeness, interpolation, and elementary theory. (*Prerequisite:* Philosophy 304A or permission of the instructor)
C.G. Morgan S(3-0)

PHIL 306 (3) THE RATIONALISTS
The main purpose of this course is to afford the student an in-depth study of the so-called "continental rationalists". To this purpose, the positions of representative figures will be examined in some detail and an attempt made to relate them to each other. Full emphasis will be placed on tracing the results to the rationalists' preoccupation with *a priori* necessary truths and the principle of sufficient reason vis-a-vis their theories of perception and knowledge. (*Prerequisite:* 100 or permission of the instructor) NO(3-0)

PHIL 310 (3) THE EMPIRICISTS AND KANT
In the first term, a study of the major writings of Locke, Berkeley and Hume, with emphasis on metaphysics and epistemology. During the second term, an intensive study of Kant's epistemology and metaphysics, principally as presented in *The Critique of Pure Reason*. (*Prerequisite:* 100 or permission of the instructor)
J.O. Young Y(3-0)

PHIL 311 (1½) EXISTENTIALIST THINKERS
This course will focus on one or two of the great philosophers in the tradition of existentialism and phenomenology, such as Nietzsche, Sartre, Merleau-Ponty, Camus, Kierkegaard and Heidegger. The philosophers chosen for study in any given year will be announced in the departmental handbook. (*Prerequisite:* 211 or permission of the instructor)
M. Langer S(3-0)

PHIL 320 (1½) ADVANCED TOPICS IN PHILOSOPHY OF SCIENCE
This course deals (at a more advanced level than in 220) with the methodology, epistemology, and ontology of science. Topics may include the logic of explanation, the logic of confirmation, the rationality of theory acceptance, the rationality of scientific revolutions, the unity of science, or the reality of theoretical entities. Not open to students holding credit for 222A. (*Prerequisite:* 220 or permission of the instructor) NO(3-0)

PHIL 324 (3) PHILOSOPHY OF HISTORY
Major theories of history, such as those of Hegel, Marx, Spengler, Toynbee, and Niebuhr will be examined, as well as questions related to the conduct of historical inquiry. In addition, attention will be devoted to contemporary theories of history that attempt to explain the significance and direction of the 20th century. (*Prerequisite:* 100 or HIST 234, 236, 240, or 242, or permission of the instructor) NO(3-0)

PHIL 326 (3) SOCIAL AND POLITICAL PHILOSOPHY: ROUSSEAU AND MARX
An inquiry into some foundational questions concerning human society and human good. Among the questions to be asked are: What are the causes of inequality and unfreedom in human societies? What are the bases of social power? Can political institutions provide the good society? Is achievement of the good society dependent upon the understanding and moral sensibility of individuals? Are the understanding and sensibility of persons a function of the kind of society in which they live? The centre of gravity of the study will be selected writings by Rousseau and Marx. But one or two important contemporary writings will be studied as well. (*Prerequisite:* a previous course in philosophy, or written permission of the instructor) (Not open to students with credit in any of 325, 327, or 329)
R.G. Beehler Y(3-0)

PHIL 328 (1½) PHILOSOPHY OF LAW
What, exactly, is law? How far, for example, does a law's being a law depend upon there being a threat of punishment if one does not obey? (What then distinguishes a society living under law from a society living under the domination of an alien military regime?) Is one always obligated to obey the law? Even an unjust law? Does one owe a duty of obedience to a corrupt government? How far do courts determine the content of the laws? Should the laws enforce morality? Should the laws protect persons from themselves? (*Prerequisite:* a previous course in philosophy, or written permission of the instructor)
R.G. Beehler NO(3-0)

PHIL 330 (1½) PROFESSIONAL AND BUSINESS ETHICS
An investigation into ethical problems and concerns that arise in the professions and business, irrespective of the particular nature of the business or profession. These include truth telling, confidentiality, paternalism, competition, monopolies, public vs. private interests or

obligations, codes of ethics, ethics of cost benefit analysis. The aim of the course is not necessarily to produce definitive solutions but to foster an awareness of the ethical issues, and to provide tools which may help to resolve them. Texts: M. Bayles, *Professional Ethics*; R. de George, *Business Ethics*; and Codes of ethics of various professional associations. F(3-0)

PHIL 331 (1½) ISSUES IN BIOMEDICAL ETHICS
An investigation into the various ethical problems and concerns that arise in the professional medical context. Issues such as the nature of the physician-patient relationship, informed consent and right to know, fetal experiments and human experiments in general, euthanasia, insanity-treatment, right to treatment, etc. will be discussed. The aim of this course is not to give definitive solutions but to inculcate an awareness and understanding of the nature of the problems involved. (*Prerequisite:* A course in Philosophy or permission of the instructor)
E.-H.W. Kluge S(3-0)

PHIL 332 (1½) PHILOSOPHY AND TECHNOLOGY
An inquiry into the nature of technology and its value and relevance to the human condition. The conceptual implications of the technological order on personal and interpersonal relationships and perceptions will be explored. Examples of topics to be addressed are: the distinction between tools and technology; technological development and values; engineering ethics and the ethics of technology transfer; technology and alienation; the domination of human life by technology; the mastery of technology; appropriate technology; art and technology; comparative analysis of different philosophies of technology. (*Prerequisites:* Third or fourth year standing, or permission of the instructor)
A.R. Drengson S(3-0)

PHIL 333 (ES314) (1½) PHILOSOPHY AND THE ENVIRONMENT
A philosophical investigation of the moral and conceptual dimensions of environmental problems. Different philosophies of the relation between humans and nature will be compared. Some of the topics to be examined are: human wants and human satisfactions; nature and spiritual values; community; human obligations to other animals; defining quality of life. (*Prerequisite:* Third or fourth year standing, or permission of instructor)
A.R. Drengson F(3-0)

PHIL 334 (3) PHILOSOPHY OF LANGUAGE
An inquiry into contemporary philosophical reflection on meaning, reference and truth. The course may address the implications of views on language for epistemology and metaphysics. The course focuses on authors such as Carnap, Wittgenstein, Quine, Davidson and Dummett. Some European writers may be discussed. (*Prerequisite:* 6 units of philosophy, or permission of the instructor) NO(3-0)

PHIL 342A (1½) MINDS AND MACHINES: I
The course is concerned with philosophical problems associated with the question of whether or not one can build a machine which thinks, reasons, learns from experience, understands natural language, is creative, feels pain, or has emotions. Topics may include mechanical analogues of life processes; the debate over mechanisms, organicism, and vitalism; mechanical self reproduction and evolution; free will and predictability. (*Prerequisite:* One full year course in at least one of the following areas: computing science, neurophysiology, philosophy or psychology; or permission of the instructor)
C.G. Morgan F(3-0)

PHIL 342B (1½) MINDS AND MACHINES: II
The course is a continuation of 342A. Topics may include: the top-down approach to artificial intelligence as advocated in the Turing Test; the analogical argument for the existence of other minds and its relation to the bottom-up approach to artificial intelligence; mechanical parallels of the mind-body problem; the relationship of Godel's incompleteness results to the possibility of mechanical minds. (*Prerequisite:* 342A or permission of the instructor) NO(3-0)

PHIL 348 (1½ or 3) DIRECTED STUDIES IN THE HISTORY OF PHILOSOPHY
Under the supervision of a faculty member and with the approval of the Chair of the Department. (*Prerequisite:* 6 units in Philosophy, or permission of the instructor) (May be taken twice for a total of 3 units)

PHIL 379 (CLAS 379) (1½) EARLY GREEK HISTORICAL AND PHILOSOPHICAL THOUGHT
An investigation into the formation in Archaic and Classical Greece of such key concepts as rationality, causality, the nature-convention antithesis, law and equality, and female inferiority. These will be considered within the context of the society (from Hesiod to Herodotus) in which they evolved. The course does not presuppose a background in either classics or philosophy. NO(3-0)

PHIL 403 (1½) PHILOSOPHICAL LOGIC
The primary objective is to determine the philosophical limitations of classical logic. By classical logic is meant bivalent first order quantification theory, together with the usual extensions of it adequate for identity theory and formal number theory. Among the questions that may be raised are: Is there satisfactory philosophical motivation for quantum logic or for many-valued logic generally? Does a good theory of reference counsel the rejection of bivalence? Does classical first order logic inhibit a philosophical understanding of existence, identity and predication? (*Prerequisites:* 201/203 or 304 (or former 202), or MATH 332 or 333, and an additional 3 units of Philosophy, or permission of the instructor)
C.G. Morgan NO(3-0)

PHIL 405 (3) 19TH CENTURY PHILOSOPHY
A main emphasis will be on the post-Kantian development in German philosophy; Fichte, Hegel, Schopenhauer, Marx, Nietzche. Some attention may also be given to the developments in France (e.g. Comte), Britain (e.g. Mill, Spencer, Bradley), and America (e.g. Royce, Peirce, James). The content of the course may vary from year to year, and the student should consult the annual Departmental handbook for a more specific description of the course for a given year. (*Prerequisites:* 9 units of philosophy, or permission of the instructor. 306 and 310 are both recommended as background for the course.) NO(3-0)

PHIL 408 (3) CONTEMPORARY EUROPEAN PHILOSOPHY
A study of one or more of the major developments in recent European philosophy, such as phenomenology, hermeneutics, structuralism, and critical theory (the Frankfurt School). Among philosophers whose works may be selected for study are: Husserl, Heidegger, Sartre, Merleau-Ponty, Ricoeur, Levi Strauss, Foucault, Althusser, Horkheimer, Habermas, and Lukacs. (The focus of the course may vary from year to year, and interested students should consult the departmental handbook for more detailed information about the course for any given year.) (*Prerequisite:* 6 units in Philosophy, or permission of the instructor)
M. Langer Y(3-0)

PHIL 414 (3) PHILOSOPHY OF MIND
The goal of this course is an understanding of mind and its place in nature. A sample of typical issues: What is mind? Is it physical or nonphysical? What is consciousness? How are mind and consciousness related to the body and the rest of nature? Are mental powers just the capacities of higher animals for adaptive and discriminative behaviour? Are conscious mental processes just neurophysiological processes? Can we know the presence of other minds? Are animals (plants, or machines) conscious? What is the scientific status of psychology, neuropsychology, anthropology, sociology, and other sciences dealing with conscious beings? (*Prerequisites:* 100, 306 or 310, or permission of the instructor)
J.E. Foss Y(3-0)

PHIL 416 (1½) KNOWLEDGE AND CERTAINTY
An analysis of the concepts of knowledge, certainty, evidence, confirmation, etc. mainly in the context of philosophical scepticism about our knowledge of the external world, other minds, the past, and the future. (*Prerequisite:* 6 units of Philosophy, or permission of the instructor)
C.B. Daniels F(3-0)

PHIL 418 (1½) THEORY OF PERCEPTION
A study of philosophical issues that pertain both to the psychology of perception and the theory of knowledge. The respective merits of realist, representationalist and phenomenalist theories of perception will come under examination. (*Prerequisite:* 6 units in Philosophy or permission of the instructor)
C.B. Daniels F(3-0)

PHIL 421 (1½) PLATO
A study of one or more Platonic dialogues, with special emphasis on the middle and late periods of Plato's philosophical activity. The content of the course may vary from year to year, and the student should consult the annual Departmental handbook for a more specific description of the course for a given year. (*Prerequisite:* 9 units of Philosophy. CLAS 379 and 380 are both recommended as background for the course.) F(3-0)

PHIL 422 (1½) ARISTOTLE
A study of one or more of the philosophical writings of Aristotle, with special emphasis on the *Metaphysics*. (*Prerequisite:* PHIL 421 or permission of the instructor. CLAS 379 and 380 are both recommended as background for the course. S(3-0)

PHIL 431 (1½) SEMINAR IN BIOMEDICAL ETHICS
A seminar offering an in depth study of selected topics in biomedical ethics. Course content will vary, but will usually include such topics as informed consent, experimentation, professional/client and professional/professional relationship, allocation of resources, administrative procedures, etc. Methodology will include the use of video tape role plays and student presentation/analysis. (*Prerequisite:* 331 or permission of the instructor) (Limit of 20 students) NO(3-0)

PHIL 432 (3) METAPHYSICS
An inquiry into some of the more general distinctions upon which our notion of reality depends. The course may vary in emphasis from year to year. Problems for investigation will include, or relate to, some of the following: On what basis do we distinguish between substance, quality and relation? Do any of the categories have a more privileged type of being than the rest? What are universals? Must every event have a cause? What sort of necessity is causal necessity? What distinguishes an action from mere happening? Do human agents have free will? What distinguishes temporal from spatial order? Why is our language tensed? (*Prerequisite:* 6 units of Philosophy or permission of the instructor) NO(3-0)

PHIL 448 (1½ or 3) DIRECTED STUDIES IN PHILOSOPHICAL TOPICS
Under the supervision of a faculty member and with the approval of the Chair of the Department. (*Prerequisite:* 9 units of Philosophy, or permission of the instructor) (May be taken twice for a total of 3 units)

DEPARTMENT OF PHYSICS AND ASTRONOMY

Lyle P. Robertson, B.A., M.A., Ph.D. (Brit. Col.), Professor and Chair of the Department
Alan Astbury, B.Sc., Ph.D. (Liv.), F.R.S.C., R.M. Pearce Professor of Physics
George A. Beer, B.A.Sc., (Brit. Col.), Ph.D. (Sask.), Professor
R. Montgomery Clements, B.A.Sc., M.A.Sc., (Brit. Col.), Ph.D. (Sask.), P.Eng. (E.E.), Professor
Fred I. Cooperstock, B.Sc. (Man.), Ph.D. (Brown), Professor
John M. Dewey, B.Sc., Ph.D. (Lond.), Professor
Harry W. Dosso, B.A., M.Sc., Ph.D. (Brit. Col.), Professor
Christopher J.R. Garrett, B.A., Ph.D. (Cantab.), Lansdowne Professor of Ocean Physics
F. David A. Hartwick, B.Eng. (McG.), M.A., Ph.D. (Tor.), Professor
Robert E. Horita, B.A.Sc., M.A.Sc., Ph.D. (Brit. Col.), Professor
Donald E. Lobb, B.E., M.Sc., Ph.D. (Sask.), Professor
Grenville R. Mason, B.A.Sc., (Brit. Col.), M.Eng. (McM.), Ph.D. (Alta.), Professor
Charles E. Picciotto, A.B., M.A., Ph.D. (Calif.), Professor
Colin D. Scarfe, B.Sc., M.Sc. (Brit. Col.), Ph.D. (Cantab.), Professor
Jeremy B. Tatum, B.Sc. (Brist.), Ph.D. (Lond.), Professor
Arthur Watton, B.Sc. (Imp. Coll., Lond.), Ph.D. (McM.), Professor
John T. Weaver, B.Sc. (Brist.), M.Sc., Ph.D. (Sask.), Professor
J. Anthony Burke, A.B., A.M., Ph.D. (Harv.), Associate Professor
Richard K. Keeler, B.Sc. (McG.), M.Sc., Ph.D. (Brit. Col.), Associate Professor
Christopher J. Pritchett, B.Sc. (Sask.), M.Sc., Ph.D. (Tor.), Associate Professor
Harbhajan S. Sandhu, B.A., B.Sc., M.Sc. (Panj.), Ph.D. (Brit. Col.), Associate Professor
Don A. VandenBerg, B.Sc. (Leth.), M.Sc. (U. of Vic.), Ph.D. (A.N.U.), Associate Professor
Chi-Shiang Wu, B.S. (Nat. Taiwan), M.S., Ph.D. (West. Res.), Associate Professor
Michel Lefebvre, B.Sc. (Laval), Ph.D. (Cantab.), Assistant Professor
Dale B. Pitman, B.A. (Wellesley), Ph.D. (Tor.), Assistant Professor
Charles R. Card, B.A. (Reed Coll.), Senior Scientific Assistant
Peter M. Cross, B.Sc. (U. of Vic.), Coordinator, Cooperative Education Program
John Goudy, C.D. and Bar, B.A. (U. of Vic.), Administrative Officer
Russell M. Robb, B.Sc. (Calg.), Senior Scientific Assistant
Donald E. Stenton, B.Sc. (Brit. Col.-Vic. Coll.), Senior Laboratory Instructor
Alexander Y. Wong, B.Sc. (U. of Vic.), Senior Laboratory Instructor
Nikiforos Zapantis, B.Sc. (Brit. Col.), Senior Programmer Analyst

Visiting and Adjunct Appointments:
Douglas A. Bryman, B.S. (Syr.), M.S. (Rutgers), Ph.D. (Virginia Poly. Inst. and St. U.), Adjunct Professor (1990-92)
Norman R. Chapman, B.Sc. (McM.), Ph.D. (Brit.Col.), Adjunct Professor (1990-92)
Christopher J. Damaren, B.Sc., M.A., Ph.D. (Tor.), Adjunct Professor (1991-93)
David M. Farmer, B.Com., M.Sc. (McG.), Ph.D. (Brit. Col.), Adjunct Professor (1989-91)
Harold W. Fearing, B.A. (Kan.), M.Sc., Ph.D. (Stan.), Adjunct Professor (1990-92)
James E. Hesser, B.A. (Kan.), M.A., Ph.D. (Prin.), Adjunct Professor (1990-92)
Roy D. Hyndman, B.A.Sc., M.A.Sc. (Brit. Col.), Ph.D. (A.N.U.), F.R.S.C., Adjunct Professor (1990-92)
Edward Irving, B.A., M.A., Sc.D. (Cantab.), D.Sc. (Car., Mem.), F.R.S.C., F.R.S., Adjunct Professor (1989-91)
Robert W. Stewart, B.Sc., M.Sc. (Queen's), Ph.D. (Cantab.), D.Sc. (McG.), LL.D. (Dal.), F.R.S.C., F.R.S., Adjunct Professor (1989-91)
Sidney van den Bergh, A.B. (Prin.), M.Sc. (Ohio St.), Dr. rer Nat. (Gött.), F.R.S.C., F.R.S., Adjunct Professor (1989-91)
Ann C. Gower, B.A., Ph.D. (Cantab.), Adjunct Associate Professor (1990-92)
Arthur Olin, B.Sc. (McG.), Ph.D. (Harv.), Adjunct Associate Professor (1989-91)
Garry C. Rogers, B.Sc. (Brit.Col.), M.Sc., (Hawaii), Ph.D. (Brit. Col.), Adjunct Associate Professor (1990-92)
Trevor Dawson, B.Sc., Ph.D. (U. of Vic.), Adjunct Assistant Professor (1990-92)
Glen M. Marshall, B.Sc. (McG.), M.Sc., Ph.D. (Brit. Col.), Adjunct Assistant Professor (1990-92)
George D. Spence, B.Sc. (Calg.), M.Sc., Ph.D. (Brit. Col.), Adjunct Assistant Professor and University Research Fellow (1989-92)

PHYSICS AND ASTRONOMY GRADUATE PROGRAMS

For information on studies leading to the M.Sc. and Ph.D. degrees, see page 279.

The Department participates in the Cooperative Education Program in the Faculty of Graduate Studies and by individual arrangement Physics graduate students may participate in a Cooperative Education graduate program as described in the Faculty of Graduate Studies section of this Calendar (page 229).

Further information may be obtained from the Chair of the Physics and Astronomy Department Graduate Committee.

ENTRY INTO PHYSICS AND ASTRONOMY UNDERGRADUATE PROGRAMS

Algebra 12 or Mathematics 12 is required for entry into the Physics

and Astronomy undergraduate programs; Physics 11 and 12 are expected, although students lacking Physics 12 may enter the programs by registering in Physics 100. Students planning to take the Honours programs should normally also have completed Chemistry 11 or 12. Advanced placement is available for students with high standing in both Algebra 12 or Mathematics 12 and Physics 12.

PHYSICS COOPERATIVE EDUCATION PROGRAM

The Cooperative Education Program in the Faculty of Arts and Science is described on page 36.

The Physics Cooperative Education Program is a year round program which includes, in addition to the normal Major or Honours academic program for the B.Sc., employment in jobs related to Physics or Astronomy in industry or government for at least four scheduled Work Terms interspersed between academic terms. This employment is related as closely as possible to the student's course of studies and individual interest.

To qualify for entry to the Physics Coop program, a student must have satisfied the university's English requirement, be enrolled full time, be proceeding to an Honours or Major degree in the Department of Physics and Astronomy, have at least a 4.50 average, and at least a second class in each physics or astronomy course taken. To remain in the program, a student must be enrolled full time and maintain at least a second class average (3.50). In addition, satisfactory performance in each Work Term is required. The first Work Term (following first year) is optional; the last four scheduled Work Terms are required. Students who choose to take the first Work Term will thus complete a total of five Work Terms. Successfully completed Work Terms will be recorded on the student's record and transcript. Work Term by Challenge, as outlined on page 32 of this Calendar, is permitted in the Physics Coop Program.

PHYSICS UNDERGRADUATE PROGRAMS

For a B.Sc. degree in physics, students have a choice of five programs: General, Major, Combined Major in Physics and Astronomy, Honours Physics or Honours in Physics and Mathematics. For a B.A. degree, students may choose the General Program in Physics for one of their fields of concentration. The Astronomy Undergraduate programs are presented on page 134.

Physics 310A may not be used as a required elective in any Physics and Astronomy program; it may be taken for credit as a free elective.

GENERAL AND MAJOR PROGRAMS

A General program in Physics must include a minimum of 9 units of Physics and Astronomy courses numbered 300 or higher.

A Major program in Physics must include the following courses: 120, 214, 215, 216 (or 316), 317 (or 217), 220, 325, 326, 413A, 413B; MATH 100, 101, 200, 201, 323A (or 325), 323B (or 326), 330A, 330B; CSC 110 or 112. Students who believe that they have the equivalent of CSC 110 or 112 may request the Physics and Astronomy Department to waive the CSC 110 or 112 requirement. In addition, 9 units ($7\frac{1}{2}$ units if 316 or 317 have been taken, 6 units if both 316 and 317 have been taken) of electives must be chosen from Physics and Astronomy courses numbered 300 or higher. At least 3 of these units must be in Physics courses.

Students who are not qualifed to enter 120 directly must precede it with 110 or both 100 and 110 for any Physics or Astronomy program.

PHYS 413A and 413B may be taken in the third year. Fourth year students are invited to attend 460 (Seminar).

Students are strongly advised to take MATH 233A, and preferably also 233B, in addition to the Mathematics courses specified for these programs.

COMBINED MAJOR IN PHYSICS AND ASTRONOMY

This program consists of a minimum of the following courses: PHYS 120, 214, 215, 216 (or 316), 220, 317 (or 217), 325, 326, 413A, 413B; ASTR 200A, 200B, 303, 304, 403, 404, and 400 or 402; MATH 100, 101, 200, 201, 330A, 330B, 323A (or 325), 323B (or 326); CSC 110 or 112. Students who believe that they have the equivalent of CSC 110 or 112 may request the Physics and Astronomy Department to waive the CSC 110 or 112 requirement. In addition 9 units ($7\frac{1}{2}$ units if 316 or 317 have been taken, 6 units if both 316 and 317 have been taken) of electives must be chosen from Physics and Astronomy courses numbered 300 or higher.

A double major in Physics and Astronomy is not offered.

HONOURS PHYSICS PROGRAMS

The courses required in an Honours Physics Program are 3 units of first year Chemistry; PHYS 120, 214, 215, 216 (or 316), 220, 317 (or 217), 321A, 321B, 325, 326, 410, 413A, 413B, 421, 422, 423, 429A, 429B; 460; MATH 100, 101, 200, 201, 233A, 233B, 323A (or 325), 323B (or 326), 330A, 330B; CSC 110 or 112. Students who believe that they have the equivalent of CSC 110 or 112 may request the Physics and Astronomy Department to waive the CSC 110 or 112 requirement. In addition, 9 units of electives must be chosen from Physics and Astronomy courses (or other approved courses) numbered 300 or higher (at least 3 units of which must be Physics courses) chosen in consultation with the Physics and Astronomy Department.

Admission to the third and fourth years of the Honours programs requires the permission of the Department. Students in the Honours programs will be expected to maintain at least second class standing. The class of Honours degree will be determined on the basis of the grade point average calculated using 30 units of upper level courses specified by the Department.

Completion of this program in four years normally requires $16\frac{1}{2}$ units of credit in the third year and 18 units of credit in the fourth year. Honours students in the Cooperative Education program are normally required to obtain credit for at least $7\frac{1}{2}$ units in each academic term, or 15 units in two successive academic terms which may be separated by a Work Term. The ninth academic term is not subject to this requirement.

HONOURS PHYSICS AND MATHEMATICS PROGRAM

The courses required in an Honours Physics and Mathematics program are three units of first year Chemistry, PHYS 120, 214, 215, 216 (or 316), 220, 317 (or 217), 321A, 321B, 325, 326, 410, 413A, 413B, 421, 422, 423, 460; MATH 100, 101, 200, 201, 233A, 233C, 325, 326, 333A, 333C, 334, 336, 338, 445A, 445B; CSC 110 or 112; plus 3 units ($1\frac{1}{2}$ if 317 taken in fourth year) of Physics and Astronomy courses numbered 300 or higher; plus $4\frac{1}{2}$ units of Mathematics courses numbered 300 or higher. Students who believe that they have the equivalent of CSC 110 or 112 may request the Physics and Astronomy Department and the Mathematics Department to waive the CSC 110 or 112 requirement.

Physics electives are to be chosen in consultation with the Physics and Astronomy Department; Mathematics electives are to be chosen in consultation with the Mathematics Department.

Admission to the third and fourth years of the Honours Program in Physics and Mathematics requires the permission of both the Department of Physics and Astronomy and the Department of Mathematics. The class of the Honours degree of a student graduating in the Honours in Physics and Mathematics Program will be determined on the basis of the grade point average calculated using 30 units of upper level courses specified by the Department. The class designated will be First Class if this average is at least 6.50 and Second Class if this average is between 3.50 and 6.49.

Completion of this program in four years normally requires 18 units of credit in each of the third and fourth years.

COURSE SEQUENCES IN PHYSICS PROGRAMS

In first year the student will begin the program with Physics 120 & 220 or Physics 110 & 120 or Physics 100 & 110 as shown in sequences A, B and C below. The sequence in first and second year is determined by the student's physics background, in third and fourth year by the program selected.

FIRST AND SECOND YEARS

Year	A	B	C
I.	PHYS 120 & 220 MATH 100 & 101 CSC 110 OR 112	PHYS 110 & 120 MATH 100 & 101 CSC 110 OR 112	PHYS 100 & 110 MATH 100 & 101 CSC 110 OR 112
II.	PHYS 214 & 215 PHYS 216	PHYS 214 & 215 PHYS 220 & 216	PHYS 214 & 215 PHYS 120 & 220

MATH 200 & 201	MATH 200 & 201	PHYS 216 MATH 200 & 201

NOTES:

1. Students satisfying any one of the A, B, or C sequences may, subject to the following notes, proceed to any one of the third or fourth year programs listed below.
2. Students planning to enter any of the Honours programs in third year should take 3 units of Chemistry in the first year.
3. Those students selecting Honours Physics should take MATH 233A and 233B in second year in addition to the courses listed in sequences A, B, and C. Those students selecting Honours in Physics and Mathematics should take MATH 233A and 233C in the first year and MATH 333A and 333C in second year. If MATH 233A and 233C are deferred to second year, then MATH 333A and 333C must be deferred to fourth year.
4. If PHYS 220 is completed in first year, PHYS 317 may be taken in second year rather than in third or fourth year.
5. ASTR 200A & 200B and PHYS 210 are recommended electives in the second year.

THIRD AND FOURTH YEARS

	Honours in Physics and Mathematics	*Honours Physics*	*General and Major*
III.	PHYS 321A & B PHYS 325 & 326 PHYS 413A & B MATH 325 & 326 MATH 334 & 336 MATH 338 MATH elective	PHYS 317 PHYS 321A & B PHYS 325 & 326 PHYS 413A & B MATH 330A & B MATH 323A & B or 325 & 326	PHYS 317 PHYS 325 & 326 MATH 330A & B MATH 323A & B or 325 & 326
IV.	PHYS 317 PHYS 410 & 421 PHYS 423 & 422 PHYS 460 PHYS electives MATH 445A & B MATH electives	PHYS 410 & 421 PHYS 423 & 422 PHYS 429A & B PHYS 460 PHYS electives	PHYS 413A & B PHYS electives

PHYSICS UNDERGRADUATE COURSES

Students should consult the Chair concerning courses offered in any particular year. The timetable also shows which courses are offered.

Where Consent of the Department is specified as a course prerequisite, this consent must be obtained from the Department Chair or the Chair's nominee.

A student may obtain at most three units of credit from the set of courses 100, 102, 103 and 110 (or 125), with the exception that a student with credit for 100 may subsequently obtain credit for 102 or 103 for a total of 4½ units.

A student who has a grade of at least B in PHYS 102 and has credit for MATH 100 (or 102) may, with the Departmental consent, use PHYS 102 to satisfy the PHYS 110 prerequisite for other Physics courses.

A student who has credit for 120 but not 110 may, with Departmental consent, subsequently take 110.

Attention is drawn to 103, a course intended for students who wish to increase their understanding of science and the physical world as part of their cultural development. It is not intended as a prerequisite for further courses in Physics.

Students should note the availability of 310A.

In many of the courses, especially those beyond first year, students will be given short lists of reference books that are helpful supplements to the prescribed texts, but that generally do not have to be bought by the students. Students may generally expect weekly problem assignments and a number of one hour tests during the term. In some courses, students may be assigned problems that may require the use of a programmable calculator or computer.

(Course offering codes: Y = Sept.-Apr., F = Sept.-Dec., S = Jan.-Apr., K = May-Aug., NO = Not offered this session)

PHYS 100 (1½) INTRODUCTORY PHYSICS
Kinematics and dynamics of motion in one and two dimensions, electrostatics, electric currents, magnetism. (Not open to students with credit for 102 or 120) (*Prerequisites:* B.C. Secondary School Physics 11 or equivalent; MATH 100 which may be taken concurrently) F(3-3)

PHYS 102 (3) GENERAL PHYSICS
Mechanics, heat, light, electricity, magnetism, and modern physics. (This course will meet the requirements in physics of students in the life sciences. Section 1, with 4 lectures per week, is for students who have not obtained credit for B.C. Secondary School Physics 11 or equivalent. Students intending to take further courses in Physics are strongly recommended to take 100 or 110 rather than 102 and must take MATH 100 and 101 rather than 102.) (*Prerequisite:* B.C. Secondary School Physics 11, except for Section 1, or equivalent; MATH 100 or 102, which may be taken concurrently) Y(3-3)

PHYS 103 (3) A SURVEY OF PHYSICS
A description of physical principles with some selected applications to problems in our modern technological society. This course is intended for students who wish to increase their understanding of science and the physical world as part of their cultural or career development. NO(3-3)

PHYS 110 (1½) ELEMENTARY PHYSICS
Review of concepts of force, work, energy. Periodic motion. Wave motion, sound, light. Reflection and refraction of light. Quantum properties of radiation; atomic and nuclear structure. Introduction to special relativity. (Credit cannot be obtained for both 110 and 125) (*Prerequisites:* B.C. Secondary School Physics 12 or equivalent or 100; MATH 100, which may be taken concurrently) FS(3-3)

PHYS 120 (1½) MECHANICS: I
Kinematics, particle dynamics, curvilinear motion, momentum, angular momentum, energy. (*Prerequisites:* 110 or 101, or at least a B standing in B.C. Secondary School Physics 12, and Algebra 12 or Mathematics 12, or equivalent courses; MATH 100 or 101 either of which may be taken concurrently) (A special section of PHYS 120 in the fall term is reserved for students planning a career in Physics or Astronomy. Students must seek Departmental advice before registering in this section.) FS(3-3)

PHYS 125 (1½) FUNDAMENTALS OF PHYSICS
Simple harmonic motion; wave motion, sinusoidal waves, phase velocity, Huygens' Principle, resonance, reflection, refraction and interference; sound; the classic Doppler effect; ray and first order matrix optics, total internal reflection and dispersion; the electromagnetic spectrum; optical spectra and electronic structure; de Broglie waves; principles and applications of nuclear structure, nuclear reactions and ionizing radiation. (Credit cannot be obtained for both 125 and 110) (*Prerequisites:* 120; MATH 100, 133 or 233A, 101 which may be taken concurrently. Only under exceptional circumstances will the Chair of the Department of Physics and Astronomy admit into this course a student who is not enrolled in the Faculty of Engineering.) S(3-3)

PHYS 210 (1½) INTRODUCTORY GEOPHYSICS
Structure of the earth, plate tectonics and seafloor spreading. Principles of geomagnetism, geoelectricity, rock magnetism, gravity, seismology, geochronology; heat flow, and solar terrestrial relations. (*Prerequisites:* 120, MATH 100 and 101) S(3-0)

PHYS 214 (1½) AN INTRODUCTION TO LABORATORY ELECTRONICS
Standard laboratory electronic equipment, circuit properties such as impedance and resonance, semiconductor devices such as diodes and transistors, system functions such as feedback and switching. (*Prerequisites:* any one of 102, 110, 120, 125, 220; MATH 100 or 102. It is suggested that students take MATH 233A or 151 either of which may be taken concurrently) F(2-4)

PHYS 215 (1½) WAVES AND INTRODUCTORY MODERN PHYSICS
Wave motion; an introduction to topics in modern physics. (*Prerequisites:* 110 or 120; MATH 200 and 201 which may be taken concurrently, or 230 or 231) SK(3-3)

PHYS 216 (1½) INTRODUCTORY ELECTRICITY AND MAGNETISM
Electrostatics, magnetostatics, dielectrics, magnetic materials, steady

currents, Faraday's Law of Induction. (*Prerequisites:* 110 or 120; MATH 200 which may be taken concurrently, or 230 or 231) SK(3-3)

PHYS 217 (1½) INTRODUCTORY THERMODYNAMICS
Introduction to equilibrium thermodynamics, with additional treatment of calorimetry and heat transfer. (*Prerequisites:* 110 or 120 or 121; MATH 200 and 201 which may be taken concurrently, or 230 or 231) NO(3-0)

PHYS 220 (1½) MECHANICS: II
Relativistic kinematics and dynamics. Noninertial systems, central force motion, harmonic oscillator, elementary rigid body dynamics. (*Prerequisites:* 120; MATH 101 which may be taken concurrently) FS(3-3)

PHYS 290 (1-3) DIRECTED STUDIES
This course is intended primarily to aid students transferring from other institutions to fit into the physics programs. Students must obtain the consent of the Department before registering. Y

PHYS 310A (1½) PHYSICS AND TECHNOLOGY OF ENERGY
An introduction to the physics and technology of producing, distributing and using energy from various sources. Present and possible future energy systems are examined with respect to efficiency, hazards and impact on world energy reserves. The course is intended for students in the humanities and social sciences, as well as the natural sciences, and may be taken for credit by students in Physics or Astronomy programs as an elective outside these programs. (*Prerequisites:* 15 units of university level credit, including 3 units of Physics, or permission of the Department) NO(3-0)

PHYS 316 (1½) ELECTRICITY AND MAGNETISM: I
Stationary electric and magnetic fields, scalar and vector potentials, dielectrics and magnetic materials, steady currents, electromagnetic induction. (*Prerequisites:* 220; MATH 200 and 201, or 230 or 231) (Not offered after 1987) NO(3-3)

PHYS 317 (1½) THERMODYNAMICS
The theory and application of thermodynamics. (*Prerequisites:* 110 or 120; MATH 200 which may be taken concurrently, or 230 or 231) FK(3-0)

PHYS 321A (1½) CLASSICAL MECHANICS: I
Topics covered include oscillatory motion, motion under a central force, dynamics of a system of particles, gravitational potential theory, special relativity. (*Prerequisites:* 220; MATH 330A or 303, and 323A or 325; the mathematics courses may be taken concurrently) F(3-0)

PHYS 321B (1½) CLASSICAL MECHANICS: II
Rigid body dynamics, an introduction to analytical mechanics including Lagrange's and Hamilton's equations, theory of small oscillations. (*Prerequisites:* 321A; MATH 303 or 330B, 323B or 326; the mathematics courses may be taken concurrently) S(3-0)

PHYS 325 (1½) OPTICS
Reflection and refraction at plane and spherical surfaces, thin lenses, lens aberrations, optical instruments, interference, diffraction, polarization. (*Prerequisites:* 220; MATH 200 and 201, or 230 or 231) F(3-3)

PHYS 326 (1½) ELECTRICITY AND MAGNETISM: II
Transients in RCL circuits, transmission lines, displacement current. Maxwell's equations, plane electromagnetic waves. (*Prerequisites:* 216 or 316; MATH 330B, and 323B or 326; all the mathematics courses may be taken concurrently) SK(3-3)

PHYS 410 (1½) TOPICS IN MATHEMATICAL PHYSICS: I
Mathematical methods applied to solving physical problems. Topics include a selection of the following: conformal mappings, Fourier and Laplace transforms with inversion theorems, calculus of variations, and group theory. (*Prerequisites:* 220; MATH 233A, 330B, and 323B or 326) F(3-0)

PHYS 411 (1½) TIME SERIES ANALYSIS
Continuous and discrete Fourier transforms, convolution and correlation, autocorrelation, spectral density estimation, deconvolution, linear filtering, frequency domain and two dimensional filtering. Digital data processing and computer analysis are stressed. (*Prerequisites:* MATH 330B, and 323B or 326) F(3-0)

PHYS 413A (1½) MODERN PHYSICS: I — INTRODUCTION TO QUANTUM PHYSICS
An introduction to quantum mechanics, the hydrogen atom, optical spectra and electronic structures, x-rays, lasers. (*Prerequisites:* 215 and either 216 or 316; the latter may be taken concurrently; MATH 330A, and 323A or 325; the mathematics courses may be taken concurrently) F(3-3)

PHYS 413B (1½) MODERN PHYSICS: II
Selected applications of quantum mechanics to molecular physics, statistical mechanics and solid state physics, nuclear physics, fundamental particles. (*Prerequisites:* 413A; MATH 330B, and 323B or 326; the mathematics courses may be taken concurrently) S(3-3)

PHYS 415 (1½) GENERAL RELATIVITY AND COSMOLOGY
Introduction to Einstein's theory of gravitation and its experimental verification. Applications within the realms of astrophysics and cosmology. (*Prerequisites:* 321B; MATH 330B; or consent of the Department) F(3-0)

PHYS 420 (1½) TOPICS IN MATHEMATICAL PHYSICS: II
Topics include a selection from advanced topics in complex variable theory and special functions. (*Prerequisite:* 410 or equivalent) (Normally open to Honours students only, others by consent of the Department) S(3-0)

PHYS 421 (1½) STATISTICAL MECHANICS
Boltzmann, Bose-Einstein and Fermi-Dirac statistics. (*Prerequisites:* 217 or 317; 321B and 413A; MATH 330B, and 323B or 326) (Normally open to Honours students only, others by consent of the Department) S(3-0)

PHYS 422 (1½) ELECTROMAGNETIC THEORY
Potential theory, Maxwell's equations, electromagnetic waves. (*Prerequisites:* 326; MATH 330B, and 323B or 326) (Normally open to Honours students only, others by consent of the Department) S(3-0)

PHYS 423 (1½) QUANTUM MECHANICS
Operator postulates, barrier penetration, harmonic oscillator, one-electron atom, angular momentum operators, spin. (*Prerequisites:* 321B and 413B; MATH 330A, and 323A or 325; the mathematics courses may be taken concurrently) (Normally open to Honours students only, others by consent of the Department) F(3-0)

PHYS 424 (1½) ATOMIC, NUCLEAR AND PARTICLE PHYSICS
Topics in nuclear, atomic, and particle physics. (*Prerequisite:* 423) S(3-0)

PHYS 425 (1½) ELECTRONICS
Electronic circuit theory with applications. (*Prerequisites:* 214, and 216 or 316; MATH 330B) F(3-0)

PHYS 426 (1½) FLUID MECHANICS
Introduction to basic theory of flow, kinematics of flow, Navier-Stokes equations, and selected topics from basic hydraulics, irrolation flows, waves, turbulent flows, similarity solutions, and compressible flows. (*Prerequisites:* 220; 217 or 317; MATH 330B, and 323B or 326; the mathematics courses may be taken concurrently) S(3-0)

PHYS 427 (1½) GEOPHYSICS
Physics of the earth, including atmospheric studies and extraterrestrial effects. Structure and composition of the earth, elementary seismology, and geomagnetism. (*Pre- or corequisites:* 326, MATH 330B, and 323B or 326) S(3-0)

PHYS 428 (1½) INTRODUCTORY SOLID STATE PHYSICS
An account of the central aspects of the physics of solids including crystal structure and symmetry; thermal, electrical, magnetic, elastic, and optical properties of solids. (*Prerequisites:* 326; 413A; MATH 330B, and 323B or 326) S(3-0)

PHYS 429A (1½) SENIOR LABORATORY AND THEORY OF MEASUREMENT: I
Advanced experiments. Instruction on experimental techniques and theory of measurement. (*Prerequisite:* 413B) F(0-6)

PHYS 429B (1½) SENIOR LABORATORY AND THEORY OF MEASUREMENT: II
Advanced experiments including student projects. Instruction on experimental techniques and theory of measurement. (*Prerequisites:* 429A) (Normally open to Honours students only, others by consent of the Department) S(0-6)

PHYS 431 (1½) CONTINUUM MECHANICS
Tensor calculus with the properties of a continuum are developed, leading to a study of wave propagation in elastic media with application to seismology. The course concludes with a brief introduction to the basic equations of fluid mechanics. (*Prerequisites:* 220, MATH 323B or 326) F(3-0)

PHYS 460 (0) PHYSICS SEMINAR
Talks by students, faculty and outside speakers. (Grading: COM, N or F) Y(2-0)

PHYS 490 (1-3) DIRECTED STUDIES
Students must obtain the consent of the Department before registering. Y

ASTRONOMY UNDERGRADUATE PROGRAMS

For a BSc degree, students have a choice of three programs: Major, Honours and a combined Major in Physics and Astronomy (See page 131). The first two years of the Major and Honours Astronomy programs are the same as the corresponding Physics programs, with the addition of ASTR 200A and 200B. It is recommended that students planning a Major in Astronomy take 3 units of first year Chemistry. In the third and fourth years Astronomy students take the following courses:

Major	*Honours*
ASTR 303 & 304	ASTR 303 & 304
ASTR 400 or 402	ASTR 400 or 402
ASTR 403 & 404	ASTR 403 & 404
PHYS 317	ASTR 429A & B
PHYS 325 & 326	ASTR 460
PHYS 413A & B	PHYS 317
MATH 330A & B	PHYS 321A & B
MATH 323A & B, or 325 & 326	PHYS 325 & 326
	PHYS 410
	PHYS 413A & B
	PHYS 422 or 423
	PHYS electives
	MATH 330A & B
	MATH 323A & B or 325 & 326

Students wishing to enter the third year of the Major or Honours program without having completed 200A and 200B will normally be required to take 200A and 200B in their third year. 303 and 304 should then be deferred to the fourth year. Students electing to take 400 or 402 in the third year may defer 304 to the fourth year. Students who have not obtained credit for PHYS 317 (or 217) in second year must take PHYS 317 in their third or fourth year.

Third and fourth year Major students are invited to attend ASTR 460, Astronomy Seminar.

HONOURS PROGRAM

Admission to the third and fourth years of the Honours program requires the permission of the Department. Students in the Honours program will be expected to maintain at least second class standing. The class of Honours degree will be determined on the basis of the grade point average calculated using 30 units of upper level courses specified by the Department.

The Honours program normally consists of 18 units in each of the third and fourth years. This may include 200A and 200B in the third year if credit has not been obtained for these courses in the second year. The electives, chosen in consultation with the Department, are normally selected from PHYS 411, 415, 420, 421, 422, 423, 424, 425, 426, 427, 428, 431.

ASTRONOMY UNDERGRADUATE COURSES

Attention is drawn to 120, a course intended for students who wish to increase their understanding of astronomy and the physical world as part of their cultural development. It is not intended as a prerequisite for further courses in Astronomy.

(Course offering codes: Y = Sept.-Apr., F = Sept.-Dec., S = Jan.-Apr., K = May-Aug., NO = Not offered this session)

ASTR 120 (3) ELEMENTARY ASTRONOMY
This course is primarily for students not majoring in Astronomy. It will present Astronomy as a representative science in its ancient and modern contexts. Topics will include: the earth, the moon, the planets, stars, stellar systems, galaxies, the universe, cosmology, space flight, and extraterrestrial life. Practical and observational work will be included. Laboratories on alternate weeks. (Senior science and mathematics students who want a single astronomy course should take 200A and 200B rather than 120.) Y(3-3)

ASTR 200A (1½) GENERAL ASTRONOMY: I
Astronomical coordinate systems, time, Kepler's laws and planetary orbits, the earth-moon system, the planets and minor planets, comets, meteors and meteorites, interplanetary particles, cosmogony, the sun. (*Prerequisites:* PHYS 120 which may be taken concurrently; MATH 100 and 101) F(3-3)

ASTR 200B (1½) GENERAL ASTRONOMY: II
Stellar distances and magnitudes, binary stars, spectral classification, stellar evolution, variable stars, stellar motions, star clusters, interstellar medium, structure and rotation of the Galaxy, external galaxies and cosmology. (*Prerequisites:* PHYS 120; MATH 100 and 101) SK(3-3)

ASTR 303 (1½) INTRODUCTORY EXTRAGALACTIC ASTRONOMY
The distance scale, properties of galaxies, observational cosmology. (*Prerequisites:* 200A and 200B; PHYS 215; PHYS 216 or 316 which may be taken concurrently; MATH 330A, and 323A or 325; the mathematics courses may be taken concurrently. PHYS 217 or 317 is desirable.) F(3-0)

ASTR 304 (1½) THE SOLAR SYSTEM
Astronomy of the sun, the planets and satellites, meteors and comets, including recent results from space exploration. (*Prerequisites:* 200A and 200B; PHYS 215; PHYS 216 or 316; PHYS 217 or 317 which may be taken concurrently; MATH 330B, and 323B or 326; the mathematics course may be taken concurrently) S(3-0)

ASTR 400 (1½) RADIO ASTRONOMY
The detection of cosmic radio waves; mechanisms for production of radio noise; the sources of radio waves; the contribution of radio astronomy to our knowledge of the universe. (*Prerequisites:* 200A and 200B or the consent of the Department; PHYS 326, 413B which may be taken concurrently; MATH 330B, and 323B or 326) S(3-0)

ASTR 402 (1½) DYNAMICAL AND GALACTIC ASTRONOMY
The positions and motions of the stars, the two and three body problems, precession, perturbation techniques, galactic rotation, the spiral structure of our Galaxy. (*Prerequisites:* 200A and 200B or the consent of the Department; PHYS 321A and 321B which may be taken concurrently; MATH 330B, and 323B or 326; the mathematics courses may be taken concurrently) S(3-0)

ASTR 403 (1½) INTRODUCTION TO ASTROPHYSICS: I
The observational data of astrophysics; stellar atmosphere and the production of stellar spectra. (*Prerequisites:* 200A and 200B or the consent of the Department, PHYS 217 or 317, and 325; PHYS 413A which may be taken concurrently; MATH 330B, and 323B or 326) F(3-0)

ASTR 404 (1½) INTRODUCTION TO ASTROPHYSICS: II
The structure and evolution of the stars; interstellar matter; high energy astrophysics. (*Prerequisites:* 403 or consent of the Department; PHYS 413B which may be taken concurrently) S(3-0)

ASTR 429A (1½) OBSERVATIONAL ASTRONOMY: I

Observational and practical work, directed reading. (Normally open to Honours students only. Others by consent of the Department) (No text required)

F(0-6)

ASTR 429B (1½) OBSERVATIONAL ASTRONOMY: II

Observational and practical work, directed reading. (Normally open to Honours students only. Others by consent of the Department) (No text required)

S(0-6)

ASTR 460 (0) ASTRONOMY SEMINAR

Talks by students, faculty and outside speakers. (Grading: COM, N or F)

Y(2-0)

ASTR 490 (1-3) DIRECTED STUDIES

(Students must obtain the consent of the Department before registering.)

Y

DEPARTMENT OF POLITICAL SCIENCE

Howard L. Biddulph, B.S. (B.Y.U.), M.A., Ph.D. (Indiana), Associate Professor and Chair of the Department (to June 30, 1991)
Robert E. Bedeski, B.A., M.A., Ph.D. (Calif.-Berk.), Professor
Ronald I. Cheffins, Q.C., B.A., LL.B. (Brit. Col.), LL.M. (Yale), of the Bar of British Columbia, Professor
Warren Magnusson, B.A. (Man.), B.Phil., D.Phil. (Oxon.), Associate Professor
J. Terence Morley, B.A. (Dal.), Ph.D. (Queen's), Associate Professor
Richard J. Powers, B.A. (New Mex.), M.A., Ph.D. (Claremont), Associate Professor
Robert B.J. Walker, B.A. (Wales), M.A., Ph.D. (Queen's), Associate Professor
R. Jeremy Wilson, B.A., M.A. (Alta.), Ph.D. (Brit. Col.), Associate Professor
Colin J. Bennett, B.Sc., M.Sc.(Wales), Ph.D. (Ill.), Assistant Professor
Bruce W. Milne, B.A., M.A. (U. of Vic.), Ph.D. (Tor.), Assistant Professor
Norman J. Ruff, B.Sc. (Econ.) (Southampton), M.A. (McM.), Ph.D. (McGill), Assistant Professor
Katherine Teghtsoonian, B.A. (Brit. Col.), M.A., Ph.D. (Stan.), Assistant Professor
Michael C. Webb, B.A. (Brit. Col.), M.Sc. (Lond.), Ph.D. (Stan.), Assistant Professor

GRADUATE PROGRAMS

For information on studies leading to the M.A. degree, see page 281.

GENERAL, MAJOR AND HONOURS PROGRAMS

The Department of Political Science offers General, Major and Honours programs leading to the B.A. Third and Fourth Year students not enrolled in the General, Major or Honours programs may take as a free elective any third or fourth year course in Political Science for which no prerequisite or other restriction is specified.

Students who may want to do graduate work are strongly advised to take POLI 339 and also some course work in statistical methods.

Information about current course offerings may be obtained from the Departmental Office in the Cornett Building.

General — A concentration in Political Science under the general program requires 6 units of Political Science courses numbered at the 100 or 200 level and 9 units at the 300 or 400 level.

Major — The Major program is open to students who have completed at least 4½ units of Political Science courses at the 100 or 200 level before the beginning of their third year, with a grade of at least C+ in each of these courses. To complete the Major program, students must have credit in at least 6 units of Political Science courses at the 100 or 200 level before graduating. Majors are required to register with the Department before the beginning of classes in their third year. Seminar courses are open only to students registered as Political Science Majors and those having the permission of the instructor. Enrollment in seminar courses is limited to 20 students while in other upper level courses the limit is 50 students. Students contemplating a Major are advised to select 200 level courses from 202, 210, 230, 240. Major students are required to complete 15 units of Political Science courses at the 300 or 400 level, including at least 3 units from 300A, 300B, 300C. They must take a minimum of 3 units from each of at least three of the Groups I-VI. Students intending to major in Political Science may wish to consult a faculty member in the Department when planning their programs for the third and fourth years.

Honours — Students will be admitted to the Honours Program in Political Science, at the discretion of the Department, at the beginning of the third year. Students must have a grade point average of at least 5.00 in 6 units of Political Science courses numbered at the 100 or 200 level. Students contemplating Honours are advised to select 200 level courses from 202, 210, 230, 240. To continue in the program in the fourth year, students must secure a grade point average of at least 6.00 in Political Science courses taken during the third year, and maintain an overall grade point average of 5.00.

The Honours program requires completion of 21 units of Political Science courses numbered at the 300 and 400 level with a minimum of 3 units from each of at least four of the Groups I-VI. The courses must include 338, 339, and 499, and at least 3 units from 300A, 300B, 300C. Honours students are required to consult a faculty member in the Department when planning their programs for the third and fourth years.

Graduation with First Class Honours requires:

(1) a graduating average of 6.50 or higher
(2) an average of 6.50 or higher in the best 21 units of Political Science at the 300 and 400 levels, and
(3) at least a grade of A- in 499

Upon completing the program, any student who meets requirement (1), but not (2) or (3), will have the option of graduating either with a First Class Major degree or (if the Honours work meets the requirements) with a Second Class Honours degree. To secure a Second Class Honours degree a student must have (1) a graduating average of 3.50 or higher, (2) an average of 4.50 or higher in the best 21 units of Political Science at the 300 and 400 levels, and (3) at least a grade of B in 499.

DEPARTMENT OF POLITICAL SCIENCE — UNDERGRADUATE COURSE INDEX

First and Second Year

100 (3)
202 (1½) 210 (1½) 220 (1½) 230 (1½) 240 (1½) 250 (1½)

Third and Fourth Year

I	*II*	*III*
Political Theory	*Comparative Government*	*Political Analysis*
300A (1½)	311 (3)	330 (1½)
300B (1½)	312 (3)	332 (3)
300C (1½)	313 (3)	338 (1½)
302 (1½)	314 (3)	339 (1½)
303 (1½)	315 (1½)	430 (1½)
404 (3)	317 (3)	431 (1½)
405 (3)	318 (1½)	433 (1½)
406 (3)	411 (1½)	
	415 (1½)	
	416 (1½)	
	418 (1½)	

IV	*V*	*VI*	*VII*
International Relations	*Public Administration & Policy Analysis*	*Canadian Government and Politics*	*Honours*
340 (3)	350 (3)	320 (3)	490 (1½ or 3)
342 (1½)	351 (1½)	360 (1½)	499 (3)
343 (1½)	352 (1½)	361 (1½)	
344 (1½)	353 (1½)	362 (1½)	
347 (1½)	425 (1½)	465 (3)	
443 (1½)	451 (1½)	468 (1½)	
445 (3)	457 (1½)	470 (3)	
446 (1½)	458 (1½)		
447 (1½)			

PROGRAM STRUCTURE

6 units of courses numbered at the 100 or 200 level

General	Major	Honours
9 units of courses numbered at the 300 or 400 level. Major	15 units at the 300 or 400 level including at least 3 units from 300A, 300B, 300C. These must include 3 units in each of at least 3 of the Groups I-VI. 490 may not be applied to this distribution requirement without approval of the Department.	338, 339, 499 and 3 units from 300A, 300B, 300C and additional units to a total of 21 at the 300 or 400 level. These must include 3 units in each of at least 4 of the Groups I-VI. 490 may not be applied to this distribution requirement without approval of the Department.

UNDERGRADUATE COURSES

The department will make every effort to ensure that the courses marked with an asterisk are offered each year. For confirmation of this, together with details of other courses to be offered, the terms in which classes will be given, and the names of course instructors, prospective students should consult the Political Science Guidebook. This Guidebook will be published in May and copies will be available at the Department of Political Science office, at Records Services, and at the Arts and Science Advising Centre.

(Course offering codes: Y = Sept.-Apr., F = Sept.-Dec., S = Jan.-Apr., K = May-Aug., NO = Not offered, this session)

*** POLI 100 (3) CANADIAN GOVERNMENT AND POLITICS**
An introduction to Political Science through an examination of the politics and institutions of Canadian Government. The course will include analysis of the social and economic context of Canadian politics and will cover such topics as parties, voting behaviour, nationalism and regionalism, federalism, parliament, the bureaucracy, the courts and the policy processes. (Credit cannot be obtained for both 100 and 470) Y(3-0)

***POLI 202 (1½) AN INTRODUCTION TO POLITICAL THEORY**
This course will focus on one or more topics in contemporary political theory such as the nature of democracy, the role of ideology, or the functions of the state. Different analyses will be compared, and students will be introduced to various models and techniques of theoretical inquiry. FS(3-0)

***POLI 210 (1½) COMPARATIVE POLITICS**
An introduction to the comparative study of politics and the basic structures and processes of modern political systems, including an examination of selected foreign governments. FS(3-0)

POLI 220 (1½) LAW AND POLITICS
An introduction to the role of law in the political process, including a description of the judicial structure in Canada, and the processes of the judiciary in the English speaking world as compared with the European tradition. F(3-0)

POLI 230 (1½) POLITICAL ANALYSIS
An introduction to contemporary political analysis. Several different approaches to the study of politics will be considered, such as institutional analysis, public choice theory and neoutilitarianism, marxist and neomarxist thought, biological, psychological and cultural perspectives and theories or political development. NO(3-0)

***POLI 240 (1½) INTERNATIONAL POLITICS**
A general introduction to the study of international politics. Attention will be directed to the foundation, development and current structure of the states system. Specific important events in the relationships among states will serve to illuminate the causes, goals, means and subsequent consequences of major foreign policy decisions. FS(3-0)

POLI 250 (1½) PUBLIC POLICY FORMATION IN CANADA
An introductory examination of the impact of cultural, economic and political factors in the determination of Canadian public policies. This course will include some case studies which compare the policy formation process in Canada with that of other countries. F(3-0)

GROUP I — POLITICAL THEORY

POLI 300A (formerly 301) (1½) ANCIENT AND MEDIEVAL POLITICAL THOUGHT
A survey of the main themes and assumptions of political theory in ancient Greece and medieval Europe, including study of Plato's *Republic* and Aristotle's *Politics*. (Not open to students with credit for 300 prior to 1982-83) F(3-0)

***POLI 300B (formerly half of 300) (1½) EARLY MODERN POLITICAL THOUGHT**
An examination of basic texts and persistent themes in Western political thought from the Renaissance to the Enlightenment, including study of texts by such key thinkers as Machiavelli, Hobbes, Locke, Hume, and Kant. (*Prerequisite:* Third or fourth year standing or permission of the Department) FS(3-0)

***POLI 300C (formerly half of 300) (1½) POST ENLIGHTENMENT POLITICAL THOUGHT**
An examination of basic texts and persistent themes in Western political thought from the Enlightenment to the late 19th century, including study of texts by such key thinkers as Rousseau, Hegel, Marx and J.S. Mill. (*Prerequisite:* 300B) S(3-0)

POLI 302 (1½) CONTEMPORARY THEMES IN POLITICAL THOUGHT
A general survey of some major themes in contemporary political thought, focusing especially on the interplay between theories of modernity and concepts of political community. Close attention will be paid to texts by Max Weber and Michael Foucault, and their significance will be assessed in the context of recent debates about, for example, feminism, ecology, political development, and world politics. (*Prerequisites:* 300B and either 300A or 300C or permission of the instructor) S(3-0)

POLI 303 (1½) POLITICAL THOUGHT IN EAST ASIA
A survey of political thought in China, Japan, and Korea, including Confucianism and Legalism, through Sun Yat-sen, Mao Zedong, and other schools and theorists. The course will focus on how political thought in the sinitic world conceptualized state and society relationships, and, in the past century, how it has confronted the challenges of Westernization and modernization. (*Prerequisite:* 318 or 202, or permission of the instructor) F(3-0)

POLI 404 (3) THEORIES OF THE MODERN STATE (seminar course)
An examination of 19th and 20th century theories of the state, with particular attention to liberal democratic thought and t the criticisms of it developed by Marxists, anarchists, and traditional conservatives. (*Prerequisite:* 300B and either 300A or 300C or permission of the instructor) Y(3-0)

POLI 405 (3) IDEOLOGY AND CONTEMPORARY POLITICAL THOUGHT (seminar course)
Competing accounts of the relationship between knowledge and power, with special attention to contemporary debates about language, moder-

nity, political identity, and legitimate authority. (*Prerequisites:* 300B and either 300A or 300C or permission of the instructor) NO(3-0)

POLI 406 (3) MARXIST POLITICAL THOUGHT (seminar course)
This course provides an analysis of the contributions to political thought of Marx, Engels, and various Marxian thinkers in the 19th and 20th centuries. Marxism is examined as a scientific theory and method, as a philosophy of history, as a mode of social criticism, and as an ideology of political change in its main varieties. (*Prerequisite:* 300C or permission of the instructor) NO (3-0)

GROUP II — COMPARATIVE GOVERNMENT

POLI 311 (3) WESTERN EUROPEAN GOVERNMENTS AND POLITICS
Analysis of the historical background to, institutional framework for, and actors involved in, political conflict in Western European countries. Consideration will also be given to a number of contemporary policy issues. (*Prerequisite:* 210 or permission of the instructor)
Y(3-0)

POLI 312 (SLAV 312) (3) COMMUNIST POLITICAL SYSTEMS
An analysis of governmental processes in Communist ruled political systems, with emphasis on Eastern Europe, the U.S.S.R., and mainland China; comparative analysis of communist revolutions, parties and groups, leadership elites, policy making and administration, political culture and socialization; and the development of the Communist international system. Y(3-0)

***POLI 313 (3) AMERICAN GOVERNMENT AND POLITICS**
An analysis of the politics and institutions of government in the United States; areas of study will include such topics as the presidential system and executive-legislative relations, judicial behaviour, political parties and electoral behaviour, and the federal framework. Y(3-0)

POLI 314 (1½) BRITISH GOVERNMENT AND POLITICS
Political institutions, organizations, and behaviour in contemporary Britain. The policy alternatives advanced by different political groups on a number of issues, including the role of the state in the economy and the territorial distribution of power. (*Prerequisite:* 210 or permission of the instructor) (Not open to students with credit in 316) S(3-0)

POLI 315 (SLAV 315) (1½) GOVERNMENT AND POLITICS IN THE U.S.S.R.
An intensive analysis of the governmental process in the Soviet Union; examination of the political development of the U.S.S.R., the political culture and socialization process, interest groups and policy making process, administration and the judicial system. F(3-0)

POLI 317 (1½) POLITICAL DEVELOPMENT
The concept of political development as an approach to the understanding of politics. Several contemporary theories will be examined as they apply to Asia, Africa, and Latin America. (*Prerequisite:* 210 or permission of the instructor)
F(3-0)

POLI 318 (1½) GOVERNMENT AND POLITICS IN EAST ASIA
Government and politics in China, Japan, North and South Korea, and Taiwan, with special attention to state formation, political reform, institutions, and ideology. (*Prerequisite:* 210 or permission of the instructor. 317 is recommended) S(3-0)

POLI 411 (1½) WOMEN AND PUBLIC POLICY IN COMPARATIVE PERSPECTIVE (seminar course)
The intent and impact of public policies which are important to women, and the avenues through which women in different countries have attempted to influence them. (A previous course in comparative politics or women's studies is strongly recommended) (Not open to students with credit in 433, "Issues in Politics: Women and Public Policy in Comparative Perspective") F(3-0)

POLI 415 (SLAV 415) (1½) POLITICAL REFORM IN THE SOVIET UNION (seminar course)
A seminar on political reform in the Soviet Union as a policy process, with special attention to the contemporary political, economic, and social changes proposed by the policy of Perestroika. Topics to be examined include: the sources of political change, setting the agenda for reform, formulating a reform policy, mobilizing public support, and the analysis of policy outcomes. (*Prerequisite:* 312 or 315, or permission of the instructor) NO(3-0)

POLI 416 (1½) STATE, REVOLUTION AND REFORM IN EAST ASIA (seminar course)
Politics, political economy, modernization reforms, ideology, and state institutions in various societies in East Asia. (A previous course in Asian politics is strongly advised) S(3-0)

POLI 418 (formerly 331) (1½) EXECUTIVE AND LEGISLATIVE POLITICS
A consideration of the functions, roles, behaviour and organization of representative assemblies in Canada, Britain and the United States. Executive-legislative relationships will be emphasized. NO(3-0)

GROUP III — POLITICAL ANALYSIS

POLI 330 (1½) PUBLIC OPINION AND MASS POLITICAL BEHAVIOUR
An examination of the factors shaping public opinion and mass political behaviour. Topics will include political participation and apathy, the formation of political attitudes and ideology, discontent and protest, social structure and political cleavages, political socialization, and voting.
S(3-0)

POLI 332 (3) URBAN AND LOCAL POLITICS
A comparative study of politics and government at the local level in Canada and abroad, with special attention to the politics of urban planning, community development, and collective consumption. (Not open to students with credit in 450) NO(3-0)

***POLI 338 (1½) POLITICAL CONCEPTS (seminar course)**
An analysis of some of the key concepts in contemporary political thought, such as "power", "authority", and "justice". This is a seminar course which Honours students are required to take during their third year. The course is recommended for other students majoring in Political Science but not recommended as a general elective. F(3-0)

POLI 339 (1½) THE EMPIRICAL ANALYSIS OF POLITICS (seminar course)
An introduction to the systematic analysis of political phenomena. Topics deal with the methodological underpinnings of political science and include: historical and institutional analyses, measurement, sampling, research design, and statistical testing. Illustrations will be drawn from various studies of political behaviour and policy formation. (Required for Honours students, preferably in their third year; recommended for students considering graduate studies in Political Science or Public Administration.) (Not open to students who have credit in 337)
S(3-0)

POLI 430 (1½) MASS MEDIA AND POLITICS
An examination of mass communication and the dissemination of political information; the course will cover both historical and contemporary questions. NO(3-0)

POLI 431 (formerly 459) (1½, formerly 3) COMPARATIVE POLITICAL ANALYSIS (seminar course)
An examination of contemporary approaches to the comparative politics of advanced industrial states. Topics covered include systems theory, elite theory, pluralism, corporatism, comparative political parties, and state autonomy. (It is recommended that students complete 210 before taking this course.) F(3-0)

POLI 433 (formerly 466) (1½ or 3) ISSUES IN POLITICS
An analysis of one or more selected political issues, such as aboriginal rights, feminism, resource ownership, political violence, or nationalist movements. (May be taken more than once on different topics up to a maximum of 3 units with permission of the Chair of the Department)
F(3-0)

GROUP IV — INTERNATIONAL RELATIONS

POLI 340 (3) INTERNATIONAL STUDIES (seminar course)
A seminar in the theory and practice of relations between modern nation-states; an examination of the traditional methods of studying international politics will be followed by an introduction to normative and empirical theory and contemporary methodologies. Y(3-0)

POLI 342 (1½) INTERNATIONAL LAW (seminar course)
A seminar in the principles and practices of international law; focus will be both historical and contemporary, and the emphasis will be on the political implications of international law. NO(3-0)

POLI 343 (1½) INTERNATIONAL ORGANIZATION (seminar course)
A seminar in the theory and development of international organizations focusing on the League of Nations, the United Nations, and institutions such as the European Economic Community and other regional organizations. NO(3-0)

POLI 344 (1½) INTERNATIONAL POLITICAL ECONOMY
The politics of international economic relations in trade, investment, finance, and macroeconomic policies from a variety of theoretical perspectives. How changes in the international political economy have altered the environment for domestic economic policy making, particularly in the advanced industrialized countries. F(3-0)

POLI 347 (1½) DISCOURSES OF WORLD POLITICS
Contemporary debates about the nature and location of political community in relation to both the historical practices of state sovereignty and claims about the increasingly global context of political life. F(3-0)

POLI 443 (SLAV 443) (1½) COMMUNIST INTERNATIONAL RELATIONS
An examination of the theory and practice of relations among Communist Party states, analyzing the domestic and external sources of behaviour, the comparative conduct of foreign policy, the integration and disintegration of the "world socialist system". S(3-0)

***POLI 445 (3) COMPARATIVE FOREIGN POLICY (seminar course)**
A seminar in the formulation, execution and evaluation of foreign policy; the development of a theoretical model for foreign policy analysis will be followed by an application of the model to the current foreign policies pursued by the major nation-states. Each student will be responsible for systematically examining the foreign policy of one nation-state. Y(3-0)

POLI 446 (1½) CANADIAN FOREIGN POLICY
Post-1945 Canadian foreign policy and the foreign policy-making process. Alternative interpretations of Canadian foreign policy will be examined in a number of specific cases in the areas of security policy, Canada-US economic relations, and Canadian policies towards the Third World. S(3-0)

POLI 447 (1½) INTERNATIONAL RELATIONS IN ASIA (seminar course)
Relations among major political actors of Asia east of Iran, including questions of security, economics, reunification (China-Taiwan and the Korean peninsula), strategy, and the relations of these states with the US and the USSR. Each country will be examined from the perspective of its domestic politics, foreign policy, and political economy. (A course on Asian politics or modern Asian history is strongly advised) (Not open to students with credit in 433, "Issues in Politics: International Relations in Asia") NO(3-0)

GROUP V — PUBLIC ADMINISTRATION

***POLI 350 (3) PUBLIC ADMINISTRATION**
An introduction to the evolution of the administrative process in government, the theory, and practice of administrative decision making, and a review of issues in organizational structure, financial and personnel administration, budgeting and administrative responsibility. Y(3-0)

POLI 351 (1½) PUBLIC POLICY ANALYSIS
A consideration of various methods of explaining and evaluating public policies, with particular attention to the techniques employed by governments. NO(3-0)

POLI 352 (1½) THE PUBLIC SERVICES
An examination of the role of public servants in the modern state, with emphasis on selection, appointment, training and human relations; the political rights of public servants; and the role of public service unions. NO(3-0)

POLI 353 (1½) THE POLITICS AND MANAGEMENT OF PUBLIC EXPENDITURE
An examination of the budgetary processes within different levels of government, of the various forms of budgeting, and of the political and administrative factors influencing public expenditure outcomes. NO(3-0)

POLI 425 (formerly 325) (1½) LAW AND PUBLIC POLICY (seminar course)
An analysis of the structures and practices of the courts, the legal profession, the police and related legal institutions in Canada. S(3-0)

POLI 451 (1½) THE POLITICS OF ORGANIZATIONAL STRUCTURE AND INSTITUTIONAL DESIGN (seminar course)
The political impact that organizational and institutional structures have on public policy. Readings will focus on theories of institutional autonomy, the design of organizations, and the administration of the policy process. (*Prerequisite:* 350 or permission of the instructor) NO(3-0)

POLI 457 (1½) THE POLITICS OF ENVIRONMENTAL AND NATURAL RESOURCE POLICY (seminar course)
An examination of the formation and implementation of environmental and natural resource policy, with an emphasis on British Columbia. Alternative approaches to the analysis of the policy making processes will be considered. (Not open to students with credit in 435, 456, 456A, or 456B) F(3-0)

POLI 458 (1½) PUBLIC POLICY AND GLOBAL ENVIRONMENTAL ISSUES (seminar course)
The comparative analysis of different nation states' policy responses to environmental issues such as global warming, population control and deforestation. The impact of differences in governmental structure, political cultures, and economic conditions will be examined. A sample of nations will be selected to allow exploration of different explanations of public policy determination. (*Prerequisite:* permission of the instructor) NO(3-0)

GROUP VI — CANADIAN GOVERNMENT AND POLITICS

All courses in this Group except 470 require credit in 100 or its equivalent as a prerequisite.

POLI 320 (3) THE CANADIAN CONSTITUTION
An analysis of Canadian constitutional law and practice; parliamentary government, the division of power, judicial authority, the Charter of Rights and Freedoms, constitutional amendment and related problems; some comparisons with other jurisdictions will be made. Y(3-0)

POLI 360 (1½) CANADIAN FEDERALISM AND PUBLIC POLICY
An examination of the constitutional, political, social, economic, and cultural bases of Canadian federalism, the dynamics of contemporary intergovernmental relations, and the impact of the federal system on public policy. F(3-0)

POLI 361 (1½) PARTIES AND PRESSURE GROUPS IN CANADA
An examination of political parties, pressure groups, and theories of representation in the Canadian context, with emphasis on the development, structure and ideologies of the major parties. S(3-0)

POLI 362 (1½) COMPARATIVE PROVINCIAL POLITICS (seminar course)
A comparative analysis of political structures and processes in the

Canadian provinces, and the variations in their forms of political behaviour. NO(3-0)

POLI 465 (3) BRITISH COLUMBIA GOVERNMENT AND POLITICS
An examination of the political institutions and processes of government in British Columbia seen in the context of the political and economic development of the province, its political cleavages and party system, and the formation of provincial public policy. Y(3-0)

POLI 468 (1½) THE POLITICS OF CANADIAN FEMINISM (seminar course)
The evolution of feminism in Canada. Selected issues relating to women's political involvement, their status in the economy and in the family will be examined. (Not open to students with credit in 433, "Issues in Politics: The Politics of Canadian Feminism") S(3-0)

***POLI 470 (3) GOVERNMENT IN CANADA**
A course designed for students in other disciplines who would like to gain some understanding of the structure and functioning of government in Canada. It will cover such topics as parties and political behaviour, federalism, the bureaucracy and the parliamentary process. This course will be of particular interest to students in the Faculties of Education, Human and Social Development, Fine Arts, and Engineering. (Not open to students with credit in 100. Not open for credit to Political Science Major and Honours students) Y(3-0)

GROUP VII — HONOURS

POLI 490 (1½ or 3) DIRECTED READING
Directed reading and/or research for Honours students under the supervision of an available faculty member may be offered to meet special circumstances. No more than 3 units of directed reading may be applied toward degree requirements and, except with the approval of the Department, such units will not be applied toward the distribution requirement. (Not open to Majors except with special permission of the Department) (This course is generally not offered in Summer Studies)

POLI 499 (3) HONOURS SEMINAR AND ESSAY
A fourth year seminar for Honours students only, which will deal with selected problems of the discipline and will help students to develop a critical approach to specialized materials. The seminar will also assist students in the preparation of a graduating essay. The essay must conform to acceptable standards of style and format, and must be submitted before the end of second term classes. (3-0)

DEPARTMENT OF PSYCHOLOGY

David F. Hultsch, B.A. (Lycoming Coll.), M.A., Ph.D. (Syr.), Lansdowne Professor of Psychology and Chair of the Department
Janet Beavin Bavelas, A.B., A.M., Ph.D. (Stan.), Professor
Michael E. Corcoran, B.A. (Northw.), M.A., Ph.D. (McG.), Professor
Louis D. Costa, A.B. (C.C.N.Y.), M.A., Ph.D. (Col.), Professor
Robert D. Gifford, B.A. (Calif., Davis), M.A., Ph.D. (S. Fraser), Professor
Ronald A. Hoppe, B.A. (Mich.), M.A., Ph.D. (Mich. St.), Professor
Richard B. May, B.A. (Whitman), M.A., Ph.D. (Claremont), Professor
G. Alexander Milton, B.A. (W. Wash.), M.S. (Ore.), Ph.D. (Stan.), Professor
Clare K. Porac, B.A. (Duquesne), M.A., Ph.D. (New School for Soc. Res.), Professor
Otfried Spreen, B.A. (Bonn), Dipl.-Psych., Ph.D. (Freib.), Professor
Charles W. Tolman, B.S., M.S., Ph.D. (Wash.), Professor and Assistant Chair
Loren E. Acker, A.A., B.A., M.A., Ph.D. (Calif., L.A.), Associate Professor
Roger A. Dixon, B.A. (N. Colo.), M.A. (Chic.), M.S., Ph.D. (Penn. State), Associate Professor
Pam Duncan, B.A. (Wis. St.), M.A. (Chic.), Ph.D. (Wis.), Associate Professor
Bram C. Goldwater, B.A. (McG.), M.A. (Corn.), Ph.D. (Bowling Gr.), Associate Professor
Roger E. Graves, B.S., Ph.D. (M.I.T.), Associate Professor
Michael A. Hunter, B.A. (S. Fraser), M.A. (Wat.), Ph.D. (S. Fraser), Associate Professor
Michael E.J. Masson, B.A. (Brit. Col.), M.A., Ph.D. (Colo.), Associate Professor
Frank J. Spellacy, B.A., (W. Wash.), M.Sc. (Ore.), Ph.D. (U. of Vic.), Associate Professor
Esther H. Strauss, B.A. (McG.), M.A. (Northeastern), M.Ed. (Bost.), Ph.D. (Tor.), Associate Professor
Nancy L. Galambos, B.S. (N.Y. St., Cortland), M.S., Ph.D. (Penn. St.), Assistant Professor
D. Stephen Lindsay, B.A. (Reed Coll.), M.A., Ph.D. (Prin.), Assistant Professor
Lorne K. Rosenblood, B.S. (Case West. Res.), M.A., Ph.D. (Ohio St.), Assistant Professor
Ronald W. Skelton, B.Sc. (Bishop's), M.A. (Conc.), Ph.D. (Brit. Col.), Assistant Professor
Thomas Allen, B.Sc. (U. of Vic.), Programmer Analyst

Visiting and Adjunct Appointments:
Alan L. Bass, M.B.B.S. (Durh.), D. Phys. Med. R.C.S., Adjunct Professor (1990-91)
Fouad A. Hamdi, M.D. (Alexandria), Ph.D. (Edin.), Honorary Professor
Charles A. Simpson, M.B.B.S. (Edin.), F.R.C.P.Ed., F.R.C.P.Can., Adjunct Professor (1990-92)
Kenneth R. Thornton, B.Sc., M.D. (Leeds), Adjunct Professor (1990-92)
Doreen Kilpatrick, B.A., M.A., Ph.D. (U. of Vic.), Adjunct Associate Professor (1990-92)
John W. Scull, B.A. (Calif., L.A.), M.A., Ph.D. (Tor.), Adjunct Associate Professor (1990-92)
Dorothy Edgell, B.A. (Birm.), M.A., Ph.D. (U. of Vic.), Adjunct Assistant Professor (1990-92)
Michael Joschko, B.Sc. (McM.), M.A., Ph.D. (Windsor), Visiting Assistant Professor (1990-92)
Alexander Moss, M.B.Ch.B. (Cape T.), Adjunct Assistant Professor (1990-91)
Beverley-Jean Riddell, B.Sc. (Alta.), M.Sc., Ph.D. (Calg.), Adjunct Assistant Professor (1990-91)
Bernice M. Seyfort, B.A., B.A., Ph.D. (U. of Vic.), Adjunct Assistant Professor (1990-92)
Caroline L. Collins, A.B. (Calif., L.A.), Visiting Lecturer (1990-91)
Marion F. Ehrenberg, B.A. (McG.), M.A. (S. Fraser), Visiting Lecturer (1990-91)
C.A. Elizabeth Luus, B.A. (St. F.X.), M.A. (Alta.), Ph.D. (Iowa St.), Visiting Lecturer (1991-92)
Marsha G. Runtz, B.Sc., M.A. (Man.), Visiting Lecturer (1991-92)

GRADUATE PROGRAMS

For information on studies leading to the M.A., Ph.D. degrees, see page 282.

LIMITATION ON ENROLLMENT

Students are advised that because of limited staff and facilities, it may be necessary to limit enrollment in certain courses. Course enrollment limits will be imposed during registration. Students will be admitted to psychology courses only on the basis of stated prerequisites and priorities.

MAJOR, HONOURS, AND GENERAL PROGRAMS

The Department of Psychology offers three undergraduate programs of study. The Major program requires specialization in Psychology in the last two years of the program, and is designed to permit students to pursue a variety of professional and business career options requiring baccalaureate level training. This program will enable students to proceed to graduate study or professional training if sufficiently high

standing is obtained. The Honours program is recommended for students planning to do graduate work in scientific or professional psychology. Students in the Major and Honours programs may proceed to either a B.A. or B.Sc. degree in Psychology. The General program is available for students who seek a general background in preparation for entry into other fields. The choice among the Major, Honours, or General programs should be made as early as possible, with the help of an Arts and Science advisor. Graduation in the Honours program requires that students be admitted to the program at the end of the third year of study, although prospective honours students are encouraged to express their interest during their third year.

Major Program Requirements (Total of 60 units)

Bachelor of Arts (B.A.) Degree

Psychology Requirements:

(a) 100, 201, 210, and 215A with a grade of at least C+ in 100, and a grade point average of at least 3.5 in 201, 210, and 215A and no grade lower than C in 201, 210, and 215A. It is strongly recommended that these courses be taken during the first two years of a student's program because no more than 6 units of upper level credit may be counted toward the Major or Honours degree before the 100, 201, 210, and 215A grade requirements are satisfied. (See Note 1).

(b) 300A and 300B with a grade of not less than C in either course, plus an additional 12 units of psychology numbered beyond 300 with at least 1.5 of these units taken from each of the following groups (defined in Note 2): developmental; biological/neuropsychology; learning/cognition/perception; personality/clinical; social/environmental.

Requirements outside Psychology:

(a) English composition (3 units chosen from ENGL 115, 116, 121, 122, 215, or 225).

(At least 1.5 units of English composition must be completed before more than 6 units of psychology courses numbered 300 and above may be counted toward the Major or Honours degree. See Note 1.)

(b) Mathematics (1.5 units chosen from MATH 100, 102, or 151).
(c) Biology (3 units chosen from BIOL 101 or 150A and 150B)
(d) Philosophy (1.5 units; 100, 201, 203, 222A, 222B, 269, 306, 310, 342A, 414, or 418 are recommended.)
(e) Anthropology, Economics, Environmental Studies, or Political Science (3 units in any combination).
(f) 9 additional units from the Humanities and/or Fine Arts as specified in Note 3.

Electives:

At least 15 units, in any combination, chosen from courses approved for credit by the Faculty of Arts and Science.

Bachelor of Science (B.Sc.) Degree

Psychology Requirements:

(a) 100, 201, 210, and 215A with a grade of at least C+ in 100, and a grade point average of at least 3.5 in 201, 210, and 215A and no grade lower than C in 201, 210, and 215A. It is strongly recommended that these courses be taken during the first two years of a student's program because no more than 6 units of upper level credit may be counted toward the Major or Honours degree before the 100, 201, 210, and 215A grade requirement is satisfied. (See Note 1.)

(b) 300A and 300B with a grade of not less than C in either course, plus an additional 12 units of psychology numbered beyond 300 with at least 1.5 of these units taken from each of the following groups (defined in Note 2): developmental; biological/neuropsychology; learning/cognition/perception; personality/clinical; social/environmental.

Requirements outside Psychology:

(a) English composition (3 units chosen from ENGL 115, 116, 121, 122, 215, or 225).

(At least 1.5 units of English composition must be completed before more than 6 units of Psychology courses numbered 300 and above may be counted toward the Major or Honours degree. See Note 1.)

(b) Mathematics (1.5 units chosen from MATH 100, 102, or 151).
(c) Biology (3 units chosen from BIOL 101 or 150A and 150B)
(d) Philosophy (1.5 units; 100, 201, 203, 222A, 222B, 269, 306, 310, 342A, 414, or 418 are recommended.)
(e) Anthropology, Economics, Environmental Studies, or Political Science (3 units in any combination).
(f) 9 additional units from the Natural Sciences as specified in Note 4.

Electives:

At least 15 units, in any combination, chosen from courses approved for credit by the Faculty of Arts and Science.

Honours Program Requirements (Total of 63 units)

Students seeking an Honours degree in Psychology should consult with the Honours Advisor of the Department by the end of their third year. Prospective honours students must complete the honours application form at the Arts and Science Advising Centre (Clearihue A117, see calendar page 35). Admission requires a minimum 6.50 grade point average in all Psychology courses, and a minimum 4.00 grade point average in nonpsychology courses. All interested students are encouraged to seek the advice of the Advisor early in their third year, and to attend the Honours Seminar (499) without credit in their third year. Honours students are responsible for finding a supervisor for their honours thesis. Consistent with the regulations of the Faculty of Arts and Science, students should complete the requirements for an Honours Program in four academic years. In certain cases an extension to five years may be recommended, but students must complete a minimum of 12 units in the winter session in which they complete the honours thesis. Requests for extensions should be made through the Arts and Science Advising Centre.

Course requirements for a B.A. or B.Sc. in the Honours program are the same as for the Major program with the following exceptions. Students must complete an additional 3 units of Psychology courses numbered above 300 (bringing their total program requirements to 63 units), and their courses must include Psychology 400A, 400B, and 499.

First Class Honours will be awarded to students who obtain:

(a) a graduating average of at least 6.50
(b) a grade point average of at least 6.50 for 300 and 400 level Psychology courses
(c) grade of at least A- in 499.

Second Class Honours will be awarded to students who obtain:

(a) a graduating average of at least 3.50
(b) a grade point average of at least 5.50 for 300 and 400 level Psychology courses
(c) a grade of at least B- in 499.

A student who obtains a first class average in all 300 and 400 level Psychology courses but a second class grade in 499 will have the option of receiving a B.A. or B.Sc. with First Class Major in Psychology or Second Class Honours. A student who achieves a grade lower than B- in 499 will graduate under the Major program provided all other requirements for the degree are fulfilled. The submission date for the thesis in Psychology 499 is the last day of classes.

General Program Requirements (Total units specified by the Faculty of Arts & Science)

Psychology Requirements

(a) Psychology 100 and 210
(b) 9 units of Psychology courses numbered 300 and above with at least 1.5 of these units taken from each of the following groups (defined in Note 2): developmental; biological/neuropsychology; learning/cognition/perception; personality/clinical; social/environmental.

Requirements outside Psychology:

The requirements of the Faculty of Arts & Science (see Calendar page 32).

Note 1: No more than 6 units of Psychology courses numbered 300 and above that are taken prior to the attainment of the required G.P.A. in 100, 201, 210, and 215A or prior to 1.5 units of English composition, may be counted toward a Major or Honours Program. (In other words, additional courses taken before this requirement is met *will not be counted toward the Major or Honours degree.*)

Note 2: Distribution requirements within Psychology are defined as follows:
(a) Bio/Neuropsychology: 315, 345A, 345B, 415, 423, 424.

(b) Learning/Cognition/Perception: 311A, 311B, 312, 313, 317A, 317B, 413.
(c) Social/Environmental: 331, 334A, 334B, 340, 350, 370A, 370B, 431.
(d) Developmental: 333A, 333B, 335, 336, 337, 339, 342, 435, 439, 450.
(e) Personality/Clinical: 330, 338, 414, 430, 432, 436.

Note 3: Humanities and Fine Arts courses for the purposes of this program are defined as Chinese, Classical Studies, English, French, German, Greek, History, Italian, Japanese, Latin, Medieval Studies, Pacific Studies, Philosophy, Russian, Serbo-Croatian, Slavonics, Spanish, Women's Studies, and the Fine Arts courses approved for credit by the Faculty of Arts and Science (page 37).

Note 4: Natural Science courses for the purpose of this program are defined as Astronomy, Biochemistry, Biology, Chemistry, Geology, Marine Science, Mathematics, Microbiology, Physics, and Statistics.

RECOMMENDED ELECTIVES

First and Second Years:

Students who plan to take 315, 415, 423, or 424 are encouraged to take BIOL 150A and 150B; in addition BIOL 207 and 320 or 305 are recommended.

Third and Fourth Years:

The Psychology Department recognizes the diversity of career orientations which might lead a student to concentrate in Psychology. Accordingly it suggests the following guidelines for upper level courses.

Students planning to enter social services — mental health, school psychology, social work, parole, child care and related fields: 311A or 311B or 313, 315, 330, 331, 430 or 432, 450 and at least 1½ units from 333A or 335 and/or 336, 337, 338, and 333B or 339.

Students planning careers in business and industry, civil service, government, personnel work: 311A or 311B, 330, 331, 334, 401, 414, 432, plus courses in other social sciences such as ECON 100, POLI 100, SOCI 319, 321.

Majors who are planning to pursue advanced degrees in Psychology are advised to take 400A and 400B.

Frequently chosen third and fourth year nonpsychology electives include SOCI 301, 304, 319, 325, 383; ED-D 316, 317, 417; BIOL 320, and PHIL 342A and 342B.

NOTE: The Bachelor's degree in Psychology is intended primarily to prepare the student for further advanced study in psychology or related fields (Education, Social Welfare, etc.), and in no way implies professional competence as a psychologist without such advanced training. Although students may on occasion find employment of a psychological nature with an undergraduate degree, it is expected that further preparation, perhaps in the form of in-service training, will normally be required by employers.

Individual Studies and Directed Readings:

During the Winter Session the Department of Psychology may give permission for individual studies and directed readings to be taken under the course numbers 390 and 490. Other course numbers are not offered as individual studies or directed readings at any time. During May-August, 390 and 490 are available only to students with an overall grade point average of 5.50 or higher in the last 15 units completed. Students seeking an exemption from these restrictions must make a formal application to the departmental undergraduate advisor.

UNDERGRADUATE COURSES

Students should consult the Department concerning courses offered in any particular year.

NOTES:

(a) 100 is a prerequisite for all courses numbered 300 and above unless an exemption is specifically stated in the course description. Second year courses are open without the 100 prerequisite, though most require at least second year standing; nonetheless, it is recommended that the student first take 100 whenever possible. Students are cautioned that enrollment in a second year psychology course without 100 will normally mean that they will be required to take 100 at a later date in order to qualify for admission to a course at the 300 or 400 level.
(b) Students who have completed Psychology 100 may enroll in up to 4½ units of psychology courses numbered 300 or above in their second year. It is strongly recommended, however, that prospective Major and Honours students satisfy as many as possible of their lower-level psychology and nonpsychology requirements in their first two years of study.

(Course offering codes: Y = Sept.-Apr., F = Sept.-Dec., S = Jan.-Apr., K = May-Aug., NO = Not offered, this session)

***PSYC 100 (3) GENERAL PSYCHOLOGY**

An introduction to the concepts, methods and history of modern psychology. Topics include perception, motivation, learning, brain processes, personality, and social processes. The purpose of this course is to present a broad survey; however, experimental demonstrations and applications will be employed to illustrate some selected topics.
Milton/Ehrenberg/Goldwater/Hoppe/
Skelton/Corcoran/Bain RY(3-0)

***PSYC 201 (formerly half of 200) (1½) INTRODUCTION TO EXPERIMENTAL PSYCHOLOGY**

An introduction to the issues related to basic research techniques used in experimental psychology; emphasis will be on the conceptual rather than the statistical rationale underlying the various research strategies. Areas that will be discussed include the nature of variables, types of measurement, how to generate and test hypotheses, types of validity, and how to interpret and report results. These topics will be elaborated in the context of in class demonstrations that will provide essential experience with the processes involved in conducting empirical research. (*Prerequisite:* 100 or at least second year standing; See also Note 1 above.)
J. Bavelas/R.E. Graves FS(3-0)

***PSYC 210 (3) THE HISTORY OF PSYCHOLOGY**

This course is designed to provide students with the background necessary to facilitate a full appreciation of upper level courses. Current problems in psychology will be examined within a historical context by reference to outstanding past and present persons and issues. (*Pre- or corequisite:* 100; See also Note 1 above)
C. Tolman/C. Lemery Y(3-0)

***PSYC 215A (formerly half of 230) (1½) INTRODUCTION TO BIOLOGICAL PSYCHOLOGY**

This course will deal with basic concepts of brain function in relation to behaviour. Topics will include basic aspects of neuronal functions, neuroanatomy, and behavioural genetics, as well as the functioning of the nervous system in relation to sensation, motor output, and at least one other aspect of behaviour. (*Prerequisite:* 100 or at least second year standing. See also Note 1 above.)
R.W. Skelton F(3-0)

***PSYC 250 (1½) INTRODUCTION TO APPLIED BEHAVIOURAL PSYCHOLOGY**

A survey of behaviour modification and biofeedback treatment technologies; behaviouristic approach is taken on such topics as sexual dysfunction, phobias and anxieties, weight control, energy conservation, pollution, employment problems, institutional and clinical treatment, public health and medical care, and alcohol and drug dependency; examples of successful programs and associated research will be pertinent to students beginning careers in Human and Social Development, Law, Public Administration, Biology, Education, Medicine, Health Sciences and Social Sciences and those intending to take 311A, 311B, 337 or 338.
L.E. Acker/D. Polson FJ(3-0)

*** It is strongly recommended that students take no more than 6 units of second year Psychology courses in any one winter session.**

NOTE: Students enrolled or planning to enroll in the Majors or Honours program in Psychology should consult Note 1 above before enrolling in more than 6 units of upper-level Psychology courses.

PSYC 300A (formerly half of 300) (1½) STATISTICAL METHODS IN PSYCHOLOGY: I
This course contains a brief review of research methodology and then goes on to deal with univariate description, bivariate description, and an introduction to probability and inferential statistics as applied in Psychology. Students are introduced to the University computer system and are expected to use computer based analyses of the statistical procedures covered in the course. (*Prerequisites:* 100 with a grade of at least C+; 201 with a grade of at least C; Math 100, 151, or 102.) (See Credit Limit, page 15.)
N. Galambos/R. May/M. Masson F(3-1)

PSYC 300B (formerly half of 300) (1½) STATISTICAL METHODS IN PSYCHOLOGY: II
The course contains a brief review of the topics covered in 300A and deals with statistical analysis procedures for two-group and multi-group experimental designs. The focus is on t-tests and analysis of variance. The differences between repeated measures and independent groups designs and analyses are emphasized. Students are expected to analyze an experimental data set using the appropriate statistical procedures, and to prepare a research report. (*Prerequisite:* 300A with a grade of at least C.) (See Credit Limit, page 15)
M. Hunter/R. May/M. Masson S(3-1)

PSYC 311A (formerly half of 311) (1½) CONDITIONING AND LEARNING: COGNITIVE EMPHASIS
A critical survey of the basic experimental findings and theories of the learning process with emphasis on the conditions for learning, retention and transfer of learning; topics include classical and operant conditioning, reinforcement, generalization and discrimination, and an introduction to concept learning; this course will provide useful background for 313. (311A is not a prerequisite for 311B) (*Prerequisites:* PSYC 100 and 3rd year standing)
R. May (3-0)

PSYC 311B (formerly half of 311) (1½) CONDITIONING AND LEARNING: BEHAVIOURAL EMPHASIS
From a behaviourist's point of view, the field of "learning" concerns very general questions about how our behaviours are acquired, maintained, and modified. The approach and methodology which constitutes the experimental analysis of behaviour seeks answers to these questions in terms of observable environmental determinants. Such principles and phenomena as respondent and operant conditioning; positive and negative reinforcement; reinforcement schedules; generalization and discrimination; and punishment will be approached from this point of view. In addition to examining animal studies, the course is designed to give the student training in the application of behavioural principles to the understanding of everyday human behaviour. (311A is not a prerequisite for 311B. This course is the preferred prerequisite for 312.)
B.C. Goldwater/Polson FQ(3-0)

PSYC 312 (1½) ADVANCED CONDITIONING AND LEARNING: BEHAVIOURAL EMPHASIS
This course follows Psychology 311B, examining some added complexities involved in phenomena covered there, as well as introducing some new topics, examples of which might include behavioural approaches to such "higher level processes" as attention, concept formation, and verbal behaviour; current controversies regarding the nature of reinforcement; and interrelations among instinctive, respondent, and operant behaviour. (*Prerequisite:* 311A or B or permission of instructor)
B.C. Goldwater S(3-0)

PSYC 313 (1½) (formerly 313A and 313B) COGNITIVE PSYCHOLOGY
An introduction to information processing analyses of mental processes. Topics include pattern recognition, attention, memory systems, language processing, concept formation, problem solving, reasoning and decision making. Relationships between these topic areas will be described. Emphasis will be placed on understanding theories and relevant research in each area, and on the general relationship between research results and theory development. Some important phenomena and methods will be illustrated with classroom demonstrations. (*Prerequisite:* 100 and at least third year standing.)
M.E.J. Masson F or S(3-0)

PSYC 315 (3) INTRODUCTION TO NEUROPSYCHOLOGY
An introduction to neuroanatomy and neurophysiology as related to human and animal brain function and behaviour. Consideration of the contributions of neurology, experimental and clinical neuropsychology to the understanding of normal cognitive and affective functioning and of disturbances resulting from brain damage in selected areas. Demonstrations involving selected patients with cerebral lesions at the Royal Jubilee Hospital will be arranged during the second term. (*Prerequisite:* 215A)
TBA/E.H. Strauss Y(2-2)

PSYC 317A (formerly half of 317) (1½) SENSATION AND PSYCHOPHYSICS
This course covers the physical basis of human sensory processing. The physiology of the visual, auditory and minor senses is covered with an emphasis on how physiological factors related to our construction of a conscious sensory experience. In addition, this course deals with how sensory experiences are measured in human observers. The four classical psychophysical problems of detection, recognition, scaling and discrimination are covered with an emphasis on their statistical measurement. (*Prerequisite:* none, but students are strongly advised to have taken 300A)
TBA F(3-0)

PSYC 317B (formerly half of 317) (1½) HUMAN PERCEPTION
An introduction to how our perceptual world is constructed from the input provided by our physical sensory structures. Topics include the construction of spatial percepts, the perception of form and art, and individual differences in perceptual experience. The emphasis is on the hypothesis testing aspects of our perceptual experience. (*Prerequisite:* 215A or 317A) NO(3-0)

PSYC 330 (3, formerly 1½) PERSONALITY
An introduction to contemporary personality theory and research; survey of several traditional theories of individual behaviour (e.g. Freud, Rogers, need achievement), plus emphasis on newest developments in the field (e.g. social influences on personality); considerable emphasis on research and methods of evaluating theories. Y(3-0)

PSYC 331 (3) SOCIAL PSYCHOLOGY
A survey of theories and findings in the following areas: social perception, socialization, social motivation, attitude development and change, interpersonal interaction, and group processes.
L.K. Rosenblood/TBA/Huxtable YR(3-0)

PSYC 333A (1½) DEVELOPMENT IN CHILDHOOD AND ADOLESCENCE
Survey of theories, methods, and research related to human development from conception through adolescence. Topics will include physical growth and development, cognitive functioning, personality and social development. Attention will be devoted to both normal development and problems of development. (Not open to students with credit in 335 and 336)
Hunter/Costello/Almeida FM(3-0)

PSYC 333B (1½) ADULT DEVELOPMENT AND AGING
Survey of theories, methods, and research related to human development from early adulthood through old age. Topics will include physical health, cognitive functioning, personality, family relationships, work and retirement and death. Attention will be devoted to both normal development and problems of development. (Not open to students with credit in 339)
Collins/Collins/Gould FSR(3-0)

PSYC 334A (formerly half of 334) (1½) PERSONNEL AND ORGANIZATIONAL PSYCHOLOGY
This course covers research and theory in personnel selection, placement, training, motivation, satisfaction, leadership, productivity and communication. (Not open to students with credit in COM 220)
TBA F(3-1)

PSYC 334B (formerly half of 334) (1½) WORKPLACE AND CONSUMER PSYCHOLOGY
This course covers research and theory on the relationship between employees and the work setting; it also introduces consumer psychol

ogy. The impact of workplace technology, stress, noise, light and office design on productivity, alcohol and drug abuse and safety behaviour is considered. Research in and methods of investigating consumer behaviour and advertising are surveyed.
R.D. Gifford S(3-1)

PSYC 335 (1½) REVIEW OF RESEARCH IN INFANCY AND CHILDHOOD
Extensive, research oriented review of work examining psychological processes from conception through about 12 years of age. Topics will include prenatal development, physical growth, perceptual and cognitive processes, language acquisition, personality development, and social processes. (Not open to students with credit in 333A) (*Prerequisites:* 201 and 210)
N. Galambos F(3-0)

PSYC 336 (1½) REVIEW OF RESEARCH IN ADOLESCENCE
Extensive, research oriented review of work examining psychological processes during adolescence. Topics will include physical development, cognitive processes, emotional development, social processes, and psychopathology. (Not open to students with credit in 333A) (*Prerequisites:* 201 and 210)
Milton S(3-0)

PSYC 337 (1½) CHILD BEHAVIOURAL DEVELOPMENT: PRINCIPLES AND ANALYSIS
This course will cover the basic principles of behavioural development from infancy to adulthood. The emphasis will be upon a critical analysis of the individual child's behaviour as being reciprocally a product of, and a determiner of, particular child rearing and institutional/educational practices.
L.E. Acker F(3-0)

PSYC 338 (1½) CHILD BEHAVIOURAL DEVELOPMENT ASSESSMENT AND MODIFICATION
This course will extend the basic principles of behaviour to areas of application in home and institutional settings for infants, children and adolescents. The emphasis will be upon a criticial analysis of various behaviour modification programs, their relationship to behaviouristic developmental theory, and the methodological requirements for implementing such programs. (*Prerequisite:* 311B or 337 or consent of instructor)
L.E. Acker S(3-0)

PSYC 339 (1½) REVIEW OF RESEARCH IN ADULTHOOD AND AGING
Extensive research oriented review of work examining psychological processes during adulthood and aging. Topics will include biological processes, perceptual and cognitive processes, personality and social processes, sources of stress, psychopathology, and death. (Not open to students with credit in 333B) (*Prerequisites:* 201 and 210)
Dixon S(3-0)

PSYC 340 (1½) INTERPERSONAL COMMUNICATION
The course examines human communication, with particular emphasis on face-to-face interaction. The topics covered are verbal communication, nonverbal communication, interpersonal systems, and systemic approaches to psychopathology. This is a theory and research course using primary sources; it does not teach communication skills, mass communication, or applied communication. (*Prerequisites:* 201 and third or fourth year standing)
B. Bavelas S(3-0)

PSYC 342 (formerly 235) (1½) THEORIES AND METHODS IN LIFE-SPAN DEVELOPMENTAL PSYCHOLOGY
A survey of the issues, theories and methods in the study of human psychological development across the entire span of life. Issues will include the influences of constitutional, familial and social factors in development. Theories will include stage, social learning, humanistic and empirical-descriptive accounts of development. Methods will cover the cross sectional, longitudinal, cross sequential, clinical, normative and experimental processes. (*Prerequisite:* 201 and 210)
Dixon S(3-0)

PSYC 345A (formerly half of 345) (1½) DRUGS AND BEHAVIOUR: BASIC PRINCIPLES
This is an introductory course designed to review the scientific literature on drugs, behaviour, and the central nervous system. Topics include introductions to pharmacology, neuropharmacology, the experimental analysis of behaviour, and the behavioural determinants of drug action. (*Prerequisites:* 215A and BIOL 150A and 150B, or permission of the instructor)
M.E. Corcoran S(3-0)

PSYC 345B (formerly half of 345) (1½) DRUGS AND BEHAVIOUR: ADVANCED TOPICS
This is a continuation of 345A, in which the general principles and information discussed in that course are applied to specific families of drugs. The drugs include psychomotor stimulants, opiate analgesics, ethanol and related depressants, major tranquilizers, anolytics, phantasticants, and others. Discussion of specific drugs will include such topics as effects on conditioned and unconditioned behaviours, mechanisms of tolerance and dependence, stimulus properties, self administration, neural mechanisms of action, social implications of drug use, and therapeutic approaches to drug use. (*Prerequisite:* 345A)
TBA, St. John SJ(3-0)

PSYC 350 (3) ENVIRONMENTAL PSYCHOLOGY
The course examines human interaction with the physical environment from a psychological perspective. Topics include environmental perception, cognition, and assessment; personality and environment; the dynamics of social space; the effects of temperature, sound, light and spatial arrangements in neighbourhoods, homes, schools and workplaces; psychological aspects of environmental hazards and disasters, the design of buildings, and resource management. (*Prerequisite:* 100 or registration in the Environmental Studies program)
R.D. Gifford Y(3-1)

PSYC 370A (LING 370A) (formerly 370) (1½) PSYCHOLINGUISTICS
Offered in collaboration with the Department of Linguistics; a course in the psychology of language covering such topics as the nature and function of language, the development of experimental psycholinguistics, the relationship of language and cognition, speech production and speech perception; comprehension and production of sentences, texts, and conversational discourse; the structure of mental representations; and the utilization of inference and semantic systems in processing natural language. The course may also cover nonverbal communication, bilingualism, and the relationship of language to sociocultural factors.
R. Hoppe F(3-0)

PSYC 370B (LING 370B) (formerly 369) (1½) DEVELOPMENTAL PSYCHOLINGUISTICS
Offered in collaboration with the Department of Linguistics. The course examines the biological bases of language; stage by stage acquisition of phonology, morphology, syntax, and semantics of the child's first language; and the child's developing metalinguistic abilities. Also treated are the child's growing awareness of the form and function of speech acts, as well as the discourse rules governing conversations. (*Prerequisite:* 370A)
R. Hoppe S(3-0)

PSYC 390 (1½ or 3) SPECIAL PROBLEMS IN PSYCHOLOGY
Directed independent study for the student. Complete arrangements must be made with an instructor in the Department before registering. (The maximum credit for 390 and 490 together must not exceed six units unless permission of the Chair of the department is obtained.)
Faculty FSY

PSYC 400A (1½) ADVANCED METHODS: THE GENERAL LINEAR MODEL
The course is an introduction to advanced research designs and their underlying rationale. Experimental design and statistical techniques will be applied to problems in psychology. Extensive treatment will be given to the use of the general linear model. The course will examine designs having multiple independent variables and a single dependent variable. Topics covered include correlation, multiple regression, analysis of

variance and sampling. (Not recommended for third year students without permission of the instructor.) (*Prerequisite:* 300 or permission of the instructor)
L.K. Rosenblood, TBA F(2-2)

PSYC 400B (1½) ADVANCED METHODS: MULTIVARIATE ANALYSIS
The course is a continuation of Psychology 400A to multivariate designs. Techniques used with multiple dependent variables such as factor analysis, multivariate analysis of variance and canonical correlation will be covered. In addition the historical and philosophical development of these techniques in psychological theory will be explored. (*Prerequisite:* 400A)
L.K. Rosenblood/TBA S(2-2)

PSYC 401 (1½) PSYCHOMETRIC METHODS
This course will cover the measurement of individual differences, especially personality and ability traits. The focus will be on reliability and validity — how do we know whether, and to what degree, a psychological measure is reliable and valid? Topics include designs for estimating reliability and validity, advanced correlation, and current problems and issues in the field. (The course does not teach how to give psychological tests.) (*Prerequisite:* 400A) S(2-2)

PSYC 410 (3) THEORETICAL FOUNDATIONS OF CONTEMPORARY PSYCHOLOGY
An examination of the theoretical and methodological assumptions underlying the psychological study of behaviour, and their historical origins and development. A consideration of selected topics in the philosophy of science as they concern psychology, theoretical models in modern psychology, controversial issues, and a comparison of different approaches to the study of human behaviour.
C.W. Tolman NO(3-0)

PSYC 413 (1½) ADVANCED TOPICS IN COGNITIVE PSYCHOLOGY
Selected topics drawn from 313 will be examined in detail. Emphasis will be on the construction and empirical testing of theories of cognitive processes. Research projects and computer simulation model demonstrations will be used to help students learn and apply research methodology and model building techniques. (*Prerequisite:* 313) F or S(3-0)

PSYC 414 (1½, formerly 3) MOTIVATION AND EMOTION
An examination of the psychological forces which activate, organize and direct human behaviour. Contemporary theoretical, conceptual and methodological issues will be assessed in the light of recent research findings and applications. Emphasis will be placed upon experiential and social factors in the relation between emotions and motivation. (Physiological factors are studied in other courses, e.g. 423, 424.)
G.A. Milton F(3-0)

PSYC 415 (1½) HUMAN NEUROPSYCHOLOGY
This course examines brain behaviour relationships by studying qualitative changes in cognitive performance following focal brain damage. The historical approach provides readings from both classical (e.g., Wernicke, Liepmann, etc.) and contemporary sources. Topics include localization of function, aphasia, agnosia, apraxia, and amnesia. Methods of clinical testing and diagnosis will be presented. (*Prerequisite:* 315 or permission of instructor)
R. Graves F(3-0)

PSYC 423 (1½) ADVANCED TOPICS IN PHYSIOLOGICAL PSYCHOLOGY
Topics will include the psychobiology of motivation, memory, and neural plasticity. There will also be some emphasis on the neuropharmacology of behaviour. (*Prerequisites:* 215A and BIOL 150A and 150B)
R.W. Skelton S(3-0)

PSYC 424 (1½) HUMAN PSYCHOPHYSIOLOGY
The study of the physiological correlates of behaviour in the intact human subject. Topics will include the autonomic nervous system; basis and principles of polygraph measurement; physiological correlates of attention and cognitive activity; the role of physiological activity in emotion; physiological effects of stress; biofeedback and meditation; and lie detection. Laboratory assignments may be given. (*Prerequisite:* 215A or BIOL 150A and 150B or some other background in human physiology is recommended, but not required)
B.C. Goldwater F(3-0)

PSYC 430 (3) ABNORMAL PSYCHOLOGY
Definitions and models of the behaviour disorders; study of behaviour disorders with regard to social attitudes, origins, development, manifestations, assessment and treatment. Emphasis is on both the behavioural and humanistic approaches to problems in abnormal psychology. Tentative structure of the course includes one formal term paper.
P. Duncan/TBA Y(3-0)

PSYC 431 (1½ or 3) ADVANCED TOPICS IN SOCIAL PSYCHOLOGY
Intensive examination of selected social aspects of human behaviour. The course may be taken for up to 3 units, on two different topics. The topic(s) covered in any given year will be announced annually by the department before registration and will be chosen among the following:
431A Attitudes (*Prerequisite:* 331)
431B Social Cognition (*Prerequisite:* 331)
431C Social Psychology of Language (*Prerequisites:* 331, 370A)
431D Face-to-face Interaction (*Prerequisite:* 340)
431E Environmental Psychology (*Prerequisite:* 350)
F and/or S(3-0)

PSYC 432 (3) SURVEY OF CLINICAL PSYCHOLOGY
An introductory survey of clinical psychology, including clinical research, methods of behaviour assessment and modification, and the role of the clinical psychologist in the community. Tentative structure of the course includes guest speakers, lectures and discussion. Open only to third and fourth year students. NO(3-0)

PSYC 435 (1½) SELECTED TOPICS IN DEVELOPMENTAL PSYCHOLOGY
This course provides an in depth examination of selected topics in the psychological literature dealing with children and/or development. The topics covered in any given year will be announced annually by the department before registration. Students receive 1½ units for this course. However, with the permission of the Chair of the Department the course may be taken more than once for a maximum of 3 units. (*Prerequisite:* 3 units of 300 or 400 level Psychology *and* permission of the instructor) NO(3-0)

PSYC 436 (1½) PSYCHOPATHOLOGY OF CHILDHOOD AND ADOLESCENCE
A detailed study of theoretical and research approaches to the understanding of developmentally related disorders of childhood and adolescence. Emphasis will be on etiology, description and treatment of these disorders which are in specific developmental "stages", although other disorders which frequently occur during childhood/adolescence will also be considered. (*Prerequisites:* 335 or 336)
TBA S(3-0)

PSYC 439 (SOCI 485) (1½) SEMINAR IN GERONTOLOGY
Offered in collaboration with the Department of Sociology; a course on the social and psychological aspects of gerontology; faculty members will present seminars on current research interests, and students will present seminars drawn from the following list of topics: physiological and neurological aspects of aging; cognitive functioning; personality; sexuality; work, retirement and leisure; psychopathological aspects of aging; death and dying; widowhood; demographic trends and consequences; aging and the family; age stereotypes and discrimination; methodological and statistical problems in the study of aging and the aged. (*Prerequisite:* 339 or SOCI 385 or permission of instructor) (Enrollment limited to 20 students)
D.F. Hultsch S(3-0)

PSYC 450 (3) DEVELOPMENTAL HANDICAP AND LEARNING DISABILITIES
A survey of prevalence, causes, research, theory and applied aspects of developmental handicap and learning disabilities in children, adolescents, and adults; second term deals primarily with topics of training, treatment, education, integration, law and attitudes. Includes visits to several hospital and other facilities. (Open to nonpsychology students

in related fields. One term paper may be required) (*Prerequisites:* 100 and either fourth year standing or written permission of the instructor) NO(3-0)

PSYC 490 (1½ or 3) ADVANCED SPECIAL PROBLEMS IN PSYCHOLOGY

Independent study for the advanced student. Complete arrangements must be made with an instructor in the Department before registering. (The maximum credit for 390 and 490 together must not exceed six units unless permission of the Chair of the Department is obtained.)

Faculty FSY

PSYC 499 (3) HONOURS THESIS AND SEMINAR

Students will attend a weekly seminar which includes oral presentation of their proposed thesis research in the first term and a progress report of the research in the second term. For the remainder of the program, the students will work closely with a faculty supervisor regarding details of the written thesis which is submitted in April. (Third year students who are thinking of joining the Honours program are encouraged to attend 499.) (*Prerequisite:* Honours standing)

O. Spreen Y(1-2-1)

DEPARTMENT OF SLAVONIC STUDIES

Zelimir B. Juricic, B.A., M.A. (Brit. Col.), Ph.D. (Nott.), Professor
Gunter H. Schaarschmidt, M.A. (Alta.), Ph.D. (Indiana), Professor
Nicholas V. Galichenko, B.A., M.A. (Brit. Col.), Ph.D. (McG.), Assistant Professor and Departmental Administrator (to July, 1991)

Visiting and Adjunct Appointments:
Zbigniew Folejewski, M.A. (Wilno), Ph.D. (Uppsala), Adjunct Professor (1991-93)

GENERAL AND MAJOR PROGRAMS IN RUSSIAN

The Department of Slavonic Studies offers a full complement of courses in Russian (and Slavonic) Studies leading to the B.A. degree in the General or Major Programs. All students planning a program in the Department of Slavonic Studies should consult the Departmental Adviser concerning their selection of courses both within and outside the Department. Students specializing in particular programs will find that they have sufficient electives to enable them to concentrate (double Major) in a second field, in such recommended areas as History, Political Science, or a modern language. A wise selection of courses is therefore important, particularly to those students who may wish to enter graduate school, teaching, library work, government service, etc.

Students planning to take either a General or Major B.A. in Russian must have a satisfactory standing in courses at the 200 level. Students with advanced credit, or those competent in Russian, will be placed at an appropriate level. Students wishing to select Russian as a teaching area in the Faculty of Education's Secondary Curriculum should consult page 148.

PROGRAMS IN RUSSIAN

GENERAL

100, 200 and 203 (or 149 and 203); nine units of Russian, Slavonic or Serbo-Croatian courses at the 300 or 400 level.

MAJOR

100, 200 and 203 (or 149 and 203); 302, 308A and 308B, 406, plus six additional units of Russian, Slavonic or Serbo-Croatian courses at the 300 or 400 level.

Only 3 units of courses from the following list may be taken as required courses for the Major in Russian: RUSS 301A, 301B, 304, 414; SLAV 312, 315, 340, 341, 374, 376, 415, 443.

COURSES

Students should consult the Department concerning courses offered in any particular year.

Courses marked with an asterisk (*) are not offered owing to financial exigency. The Department intends to offer them as soon as funding is available and enrollment is sufficient.

(Course offering codes: Y = Sept.-Apr., F = Sept.-Dec., S = Jan.-Apr., K = May-Aug., NO = Not offered, this session)

RUSSIAN

RUSS 100 (3) FIRST YEAR RUSSIAN
Introduction to the fundamentals of Russian grammar; basic reading, writing and conversational skills. (*Prerequisite:* No prior knowledge of Russian is required.) Y(3-1)

***RUSS 149 (6) INTENSIVE RUSSIAN**
This course is designed to cover a basic two year study of the Russian language in one year (equivalent to Russian 100 plus Russian 200) and to provide a rapid and thorough grounding in how to read, write and speak Russian, with an emphasis on making practical use of the language as early as possible. Short texts and audiovisual materials will be used to reinforce reading and comprehension and to prepare students for conversation practice. (*Prerequisite:* None. Students with credit for 100 may not take this course for credit. Students not making satisfactory progress will be advised to transfer to 100.) NO(5-2)

RUSS 200 (3) SECOND YEAR RUSSIAN
A continuation of 100, this course is designed to complete the fundamentals of Russian grammar. (*Prerequisite:* 100) (Not open to students with credit for 149) Y(3-1)

RUSS 203 (3) ORAL AND WRITTEN PRACTICE
This course is designed to provide students with oral and written practice in Russian, based on selected literary and popular materials. (*Prerequisite:* 100) Y(3-0)

RUSS 301A (formerly part of 301) (1½) ASPECTS OF RUSSIAN CULTURE: I (In English)
A survey of Russian culture from the beginnings to 1905. Lectures will focus on major developments in literature, folklore, philosophy, religion, music, art and architecture, as seen against the background of Russia's historical past. (*Prerequisite:* None, this course is open to all students, except students with credit in 301) NO(3-0)

RUSS 301B (formerly part of 301) ASPECTS OF RUSSIAN CULTURE: II (In English)
A survey of Russian culture from 1905 to the present. Lectures will focus on major developments in literature, religion, music and the arts in an attempt to give students a cultural perspective for viewing the contemporary Russian way of life. (*Prerequisite:* None, this course is open to all students, except students with credit in 301) NO(3-0)

RUSS 302 (3) THIRD YEAR RUSSIAN
A sequel to 149 or 200, this course is designed to improve the students' mastery of the spoken and written language. Emphasis on informal grammar review, conversation, reading, composition and comprehension. (*Prerequisites:* 200 and 203, or permission of the Department) Y(3-0)

RUSS 303 (3) INTERMEDIATE RUSSIAN PRACTICE
This course, a sequel to 203, is designed to provide students with more advanced oral and written practice in Russian and to enhance reading skills based on major works of literature. The course is conducted in Russian. (*Prerequisite:* 200 or 149, and 203, or permission of the Department) NO(3-0)

RUSS 304 (1½) LITERATURE AND CINEMA IN THE U.S.S.R. (In English)
A survey of selected films that are adaptations of significant literary works or illustrate important cultural events or movements. (*Prerequisite:* None, this course is open to all students) NO(3-0)

RUSS 308A (formerly part of 308) (1½) RUSSIAN LITERATURE IN TRANSLATION: I (In English)
A survey of Russian literature from its beginnings to 1917. This is a required course for Russian major students to be taken in their third or fourth year and in the same winter session as 308B. (Offered in alternate years) (*Prerequisite:* None, this course is open to all students) F(3-0)

RUSS 308B (formerly part of 308) (1½) RUSSIAN LITERATURE IN TRANSLATION: II (In English)
A survey of Russian literature from 1917 to the present. This is a required course for Russian major students to be taken in their third or fourth year and in the same winter session as 308A. (Offered in alternate years) (*Prerequisite:* None, this course is open to all students) S(3-0)

***RUSS 321 (3) RUSSIAN WORKSHOP IN THE SOVIET UNION**
Under the supervision of faculty, students will be engaged in specialized projects dealing with Russian language and culture. (May be taken more than once to a maximum of 6 units with permission of the Department) (*Prerequisite:* 100 or 390 or the permission of the Department) (Note: This course will involve one month's study in the Soviet Union; for details consult the Department.) NO

RUSS 331 (formerly 250) (1½) THE PEOPLES OF THE SOVIET UNION (In English)
An introductory survey of the cultures of the non-Slavic peoples of the Soviet Union: European Russia, the Caucasus, Soviet Central Asia and Siberia. (*Prerequisite:* None. This course is open to all students) NO(3-0)

***RUSS 390 (3) RUSSIAN READING COURSE**
A one year course, intended for students who wish to read Soviet journals in the fields of the Natural and Social Sciences and the Humanities. Material is chosen corresponding to the students' areas of interest. (*Prerequisite:* None, this course is open to all students. Students who have passed 100 cannot receive credit for this course.) (Offered in Summer Studies) NO(3-0)

RUSS 403 (1½ or 3) READINGS IN RUSSIAN LITERATURE
This course will examine various authors and/or movements in Russian literature of the 19th and 20th centuries. Students are advised to consult the Department about the topics to be considered in any given year. (May be taken more than once, to a maximum of 6 units, with permission of the Chair of the Department) (*Prerequisite:* 302 and 303, or permission of the Department) NO(3-0)

RUSS 406 (3) FOURTH YEAR RUSSIAN
A continuation of 302. An advanced course in the use of Russian, both written and spoken. This course will stress written composition, stylistic analysis, conversational fluency. (*Prerequisite:* 302) Y(3-0)

RUSS 414 (formerly part of 412 and 413) (1½) TOLSTOY AND DOSTOEVSKY (In English)
The works of two major Russian writers of the 19th century will be studied against the background of their lives and times. (*Prerequisite:* Second year standing) NO(3-0)

RUSS 426 (1½) PRACTICAL TRANSLATION
A study of practical translation from and into Russian. Material will be drawn from a representative variety of fields including business, law, social work, politics, literature, Soviet press and sciences. (*Prerequisite:* 302) F(3-0)

RUSS 427 (1½) ADVANCED CONVERSATION
This course, conducted entirely in Russian, is designed to further the students' command of idiomatic Russian and to enhance oral skills. (*Prerequisite:* 302, or permission of the Department) S(3-0)

RUSS 434 (1½ or 3) SPECIAL TOPICS
This course is designed for Major students and may be offered either as a reading course, or a seminar, depending on the students' interest and on the availability of a supervising instructor. (May be taken twice in different topics to a maximum of six units) (*Prerequisite:* 200 or 149, and 203, and permission of the Department) NO(3-0)

SLAVONICS

SLAV 312 (POLI 312) (3) COMMUNIST POLITICAL SYSTEMS (In English)
An analysis of governmental processes in Communist ruled political systems, with emphasis on Eastern Europe, the U.S.S.R., and mainland China; comparative analysis of Communist revolutions, parties and groups, leadership elites, policy making and administration, political culture and socialization; and the development of the Communist international system. (Students are strongly advised to complete an introductory course in Political Science before undertaking this advanced course) Y(3-0)

SLAV 315 (POLI 315) (1½) GOVERNMENT AND POLITICS IN THE U.S.S.R. (In English)
An intensive analysis of the governmental process in the Soviet Union: examination of the political development of the U.S.S.R., the political culture and socialization process, interest groups and policy making process, administration and the judicial system. (Students are strongly advised to complete an introductory course in Political Science before undertaking this advanced course) F(3-0)

SLAV 340 (LING 340) (1½) INTRODUCTION TO THE SLAVIC LANGUAGES (In English)
This course will acquaint students with the family of Slavic languages, their history and place within the Indo-European language family, and their present day structure. (*Prerequisite:* A previous course in Linguistics or permission of the Department) NO(3-0)

SLAV 341 (LING 341) (1½) SEMINAR IN A SLAVIC LANGUAGE: STRUCTURE AND HISTORY (In English)
Although designed as a continuation of 340 (Linguistics 340), this course can be taken independently as well, and more than once for credit (in different languages), to a maximum of 3 units. This course will deal with the history and structure of a Slavic language not offered otherwise in the Department of Slavonic Studies. Depending upon demand, a different language will be treated in each given year. Languages offered at present are: Serbian, Polish, Ukrainian, Czech. (*Prerequisite:* A previous course in Linguistics or permission of the Department) NO(3-0)

SLAV 374 (HIST 374) (3) IMPERIAL RUSSIA, 1689-1917 (In English)
A history of Russia from Peter the Great to the fall of the monarchy. The course traces the response of the Russian state and Russian society to changing national needs and the challenge of the West. Through reports and discussions, emphasis will be given to periods of rapid change. (Students are strongly advised to complete an introductory course in history before undertaking this advanced course.) NO(3-0)

SLAV 376 (HIST 376) (1½) THE SOVIET UNION (In English)
A history of the U.S.S.R. from 1917 to the present. The course will analyze the forces that have moulded the policies of the Communist leadership and examine how these policies have affected the shape of Soviet society and the role of the Soviet Union in world affairs. (Students are strongly advised to complete an introductory course in history before undertaking this advanced course.)
D.L. Senese S(3-0)

SLAV 390 (1½ or 3) DIRECTED STUDIES IN A SLAVIC LANGUAGE
This course may be offered as a reading or grammar course at any level, from introductory to advanced. The language may be Serbo-Croatian, Russian, or another Slavic language. The course may also be offered as an introduction to teaching methodology in the Russian language. (May be taken more than once in a given language to a maximum of six units) (*Prerequisite:* Permission of the Department) NO

SLAV 415 (POLI 415) (1½) POLITICAL REFORM IN THE SOVIET UNION
A seminar on political reform in the Soviet Union as a policy process, with special attention to contemporary political, economic, and social changes. Topics to be examined include: the sources of political change, setting the agenda for reform, formulating a reform policy, mobilizing public support, and the analysis of policy outcomes. (*Prerequisite:* POLI 312 or 315, or permission of the instructor) NO(3-0)

SLAV 443 (POLI 443) (1½) COMMUNIST INTERNATIONAL RELATIONS (In English)
An examination of the theory and practice of relations among Communist Party states, analyzing the domestic and external sources of behaviour, the comparative conduct of foreign policy, the integration and disintegration of the "world socialist system". (Students are strongly advised to complete an introductory course in Political Science before undertaking this advanced course) S(3-0)

SERBO-CROATIAN

***SERB 300 (3) FIRST YEAR SERBO-CROATIAN**
Introduction to the fundamentals of Serbo-Croatian grammar; basic reading, writing and conversational skills. (*Prerequisite:* A 200 level course in a foreign language or its equivalent, or the permission of the Department) NO(3-0)

***SERB 400 (3) SECOND YEAR SERBO-CROATIAN**
Review of essential grammar, progressing into more advanced grammar and composition; conversation with some practice in the language laboratory. (*Prerequisite:* 300, or its equivalent, or the permission of the instructor) NO(3-0)

DEPARTMENT OF SOCIOLOGY

Paul M. Baker, B.A. (U. of Vic.), M.A., Ph.D. (Minn.), Associate Professor and Chair of the Department (to June 30, 1991)
R. Alan Hedley, B.A., M.A. (Brit. Col.), Ph.D. (Ore.), Professor
Robert Hagedorn, B.A. (San. Fran. St.), M.A. (Wash.), Ph.D. (Texas), Professor (part time sessional lecturer)
Jean E. Veevers, B.A., M.A. (Alta.), Ph.D. (Tor.), Professor
William K. Carroll, B.A. (Brock), M.A., Ph.D. (York), Associate Professor
C. David Gartrell, B.A. (Brit. Col.), M.A., Ph.D. (Harv.), Associate Professor
Daniel J. Koenig, A.B. (Notre Dame), M.S. (Florida St.), Ph.D. (Ill.), Associate Professor
Richard L. Ogmundson, B.A. (U. of Vic.), M.A., Ph.D. (Mich.), Associate Professor
T. Rennie Warburton, B.A. (Leeds), Ph.D. (Lond.), Associate Professor
Cecilia M. Benoit, B.A., (McM.), Ph.D. (Tor.), Assistant Professor
Holly Devor, B.A. (York), M.A. (S. Fraser), Ph.D. (Wash.), Assistant Professor
Bill McCarthy, B.A. (Guelph), B.Ed. (W. Ont.), M.A., Ph.D. (Tor.), Assistant Professor
Peter Vandergeest, B.Sc. (Wat.), M.S., Ph.D. (Corn.), Assistant Professor

GRADUATE PROGRAM

For information on studies leading to the M.A. degree, see page 289.

UNDERGRADUATE PROGRAMS

The Department offers General, Major and Honours programs. Students interested in any of these programs are urged to consult the departmental undergraduate adviser as early as possible.

Sociology 100 is required for all three programs. This requirement may be satisfied by course challenge or may be omitted by permission of the Department.

General: In addition to 100, the General Program requires 210, 211, and nine additional units of Sociology from courses numbered 300 and above.

Major: In addition to 100, the Major Program requires 210, 211, 302, 371, 375, 402 and 7½ additional units of Sociology numbered 300 and above.

Honours: In addition to 100, the Honours program requires 210, 211, 302, 371, 375, 402, 471, 499, and 10½ additional units of Sociology numbered 300 and above. It is recommended that Honours students take Sociology 371 and 471 as early as possible.

To receive a First Class Honours degree a student must obtain a grade of at least A- in 499, and a minimum grade point average of 7.00 for all Sociology courses numbered 300 and above, and have a minimum graduating average of 6.50.

To receive a Second Class Honours degree a student must obtain a grade of at least B- in 499, and a grade point average of at least 6.00 in all Sociology courses numbered 300 and above, and have a minimum graduating average of 3.50.

Honours students who do not meet the above requirements, but complete those for a Major in Sociology, may opt to receive a Major degree. A student who opts for this and who has a graduating average of 6.50 would receive a Major in Sociology with First Class standing, while a student with a graduating average between 3.50 and 6.49 would receive a Major degree with Second Class standing.

UNDERGRADUATE COURSES

Some of these courses are not offered every year. Please consult with the Department to find out which courses will be given in a particular year.

Prerequisite for Third and Fourth Year courses: Courses numbered 300 and above may be chosen as electives if one of the following criteria is satisfied:

(a) Completion of 100 with a grade of A- or better
(b) Completion of 100 and 1½ additional units of sociology numbered below 300, with a mean grade of C+ or better
(c) Third Year standing with a G.P.A. in the previous academic year of 4.00 or better and the written permission of the instructor.

(Course offering codes: Y = Sept.-Apr., F = Sept.-Dec., S = Jan.-Apr., K = May-Aug., NO = Not offered, this session)

SOCI 100 (1½ formerly 3) INTRODUCTION TO SOCIOLOGY
A general introduction to the perspectives and methods of sociology, including a consideration of basic concepts and problems in the analysis of groups and societies. (3-0)

SOCI 103 (formerly half of 200) (1½) CANADIAN SOCIETY
The origins, development, and structure of Canadian society analyzed in terms of the new Canadian political economy. Examples of questions which may be addressed are: What kind of society exists in Canada? How did it come to acquire its unique features? What role has immigration played in Canada's development? What kinds of social inequality exist in Canada and why? (3-0)

SOCI 202 (1½) AN INTRODUCTION TO SOCIAL PROBLEMS
A survey of the incidence, correlates, effects and social response to crime and delinquency, familial disruption, economic deprivation and racial, ethnic and sex discrimination, etc. (3-0)

SOCI 203 (formerly half of 200) (1½) CANADIAN SOCIAL ISSUES
Issues facing Canadian society examined from the standpoint of the new Canadian political economy. Topics addressed may include: Foreign domination, national identity and national integration; Quebec in Canada; regionalism; native peoples' concerns; multiculturalism; immigration policy; the social position of women. (3-0)

SOCI 210 (1½) HISTORY OF SOCIOLOGICAL THEORY
Analysis of major theoretical influences on the development of sociology, including the work of Marx, Weber, Durkheim, Simmel, Mead, Parsons and others. (Not open to students who have completed 209 or 300) (3-0)

SOCI 211 (1½) INTRODUCTION TO SOCIOLOGICAL RESEARCH
Introduction to important concepts and strategies of social research to enable students to evaluate critically the results of published research

and begin to carry out research of their own. The course will present current methodological issues and the basic steps involved in doing research. (Not open to students who have completed 209 or 375) (3-0)

SOCI 301 (3) SOCIAL CONTROL AND DEVIANT BEHAVIOUR
Types of social control are examined through analyzing conceptualizations and statistics about crime and other forms of deviance. (3-0)

SOCI 302 (formerly part of 300) (1½) SOCIOLOGICAL EXPLANATIONS
Nature of explanations in sociological theory, combining an evaluation of different conceptions of the nature of science with an examination of important sociological theorists and frameworks. (Not open to students who have completed 300) (*Prerequisite:* 210 or permission of instructor) (3-0)

SOCI 304 (1½) (formerly 3) THE INDIVIDUAL AND SOCIETY: I
An introduction to sociological perspectives on social psychology, emphasizing the importance of social structure in accounting for such topics as social cognition, the self, social interaction, and collective behaviour. Students will have the opportunity to experience directly, in a series of research exercises, the diverse research methods used by social psychologists. (3-0)

SOCI 305 (3) SOCIOLOGY OF FAMILIES AND HOUSEHOLDS
Consideration of similarities and differences regarding families and households as an alternative unit of analysis. In the first term the focus will be upon families and households in comparative perspective, and their relationship to the larger society. In the second term the internal organization of families and households and interpersonal processes within them will be examined. Sex roles. The socialization of the young. Alternatives to the conventional family. (3-0)

SOCI 310 (1½) RELIGION IN SOCIETY
Selected theories and research on the relationship between religion and other areas of society. Topics may include: sects, cults and other religious organizations; religion and the social position of women; religion and political conflict; the issue of the rising or declining influence of religion in contemporary societies. (3-0)

SOCI 311 (1½) IDEOLOGY AND SOCIETY
Selected topics from Marx, Mannheim and contemporary sociological studies on the relation of ideology to social structure and social change. (3-0)

SOCI 315 (1½, formerly 3) CLASS, STATUS, AND POWER
An overview of theory and research in the area of social inequality. Focus is on the sources and consequences of the various forms of inequality (e.g., political, social, economic) found in present day societies. (3-0)

SOCI 316 (1½) SOCIAL MOVEMENTS
A study of the sources, stages and consequences of social movements. Various theories about the nature of social movements will be discussed. Data bearing on these theories concerning topics such as the nature of participants, the importance of elite leadership, the role of communication networks, and the activity of agents of social control will also be considered. Specific social movements, such as feminism, environmentalism, gay and lesbian liberation, the peace movement, trade unionism, socialism, and national liberation will be examined in detail. (3-0)

SOCI 319 (1½) INDUSTRIAL SOCIOLOGY
Major topics include industrialization and the relation between the rich and poor nations, industrialization in Canada, labor force trends, individual-work linkages and labour-management relations. (3-0)

SOCI 321 (1½) SOCIOLOGY OF OCCUPATIONS
Attitudes to work, similarities and differences between occupations; the nature of professions; the contrast between jobs and careers. (3-0)

SOCI 323 (1½) STRUCTURE OF FORMAL ORGANIZATIONS
Theories of and methodological problems in the study of organizational structures. Structural dimensions of the division of labour, power, communication, hierarchy, size, technology, and the relationships between organizations will be stressed. (3-0)

SOCI 324 (1½) PROCESS AND CHANGE IN FORMAL ORGANIZATIONS
The first half of the course will cover such topics as norms, values, and roles, including morale, administration, job satisfaction and alienation. The second half will cover organizational change including the evolving types of formal organizations. (3-0)

SOCI 325 (1½) SMALL GROUP DYNAMICS
A survey of sociological approaches to small groups, including topics such as group formation and cohesion, group influence on the individual, group differentiation, decision making and problem solving in groups, and collective behaviour. Small group research methodology will be a major concern, and will be taught by a series of labs in the Small Groups Laboratory as well as in the field. (3-0)

SOCI 326 (1½) SOCIAL NETWORKS
This course examines the major models, methods, and findings which characterize network analysis as an approach to the study of social life; the following areas may be discussed: friendship, social influence and status, small groups, communication and diffusion of information, corporate and community organization, social and economic mobility; the sorts of questions posed include: do contacts really make a difference in the kinds of jobs people get? How small is the "small world"? How closely connected are the boards of directors of major corporations? (3-0)

SOCI 331 (formerly half of 330) (1½) POLITICAL SOCIOLOGY
Study of the social bases (e.g. region, class, religion, ethnicity, language, culture) of political behaviour. (3-0)

SOCI 332 (formerly half of 330) (1½) ELITES AND SOCIETY
Study of institutional elites (e.g., business, labour, state, media, church, educational, military) and their roles in society. (3-0)

SOCI 335 (1½) ETHNIC AND RACE RELATIONS
Using mainly Canadian examples, this course will examine theories and research on ethnicity as identity and on ethnic and race relations as elements of social inequality. (3-0)

SOCI 343 (1½) CANADIAN DEMOGRAPHY
Study of the growth, distribution and movement of the Canadian population with special emphasis upon the social causes of changes in patterns of fertility, mortality and migration and the social implications of these changes for Canadian society. (Note: Credit cannot be given for both 343 and 340) (3-0)

SOCI 350 (1½) (formerly 3) SOCIAL WELFARE AS A SOCIAL INSTITUTION
The historical development of social welfare as a social institution; the organizations of welfare services and the functions they perform in modern society; the relation of social welfare to other institutions. (3-0)

SOCI 355 (1½) THE CORPORATION AND SOCIETY
The corporation as a basic institution in modern Western societies; its development in Canada and elsewhere; its impact on other institutions, including the family, education, the state and social class. (3-0)

SOCI 365 (1½) SOCIOLOGY OF LEISURE
Conceptual problems in the identification of leisure. The production, consumption and distribution of leisure. The emergence of leisure defined lifestyles. The study of selected leisure activities. (3-0)

SOCI 371 (1½) STATISTICAL ANALYSIS IN SOCIOLOGY: I
Introduction to the logic and interpretation of elementary statistics in the Social Sciences, with special emphasis on problems unique to Sociology. The calculation and interpretation of basic measures of central tendency, variability, and association will be stressed. Problems of measurement, sampling, estimation, and inference will also be covered. (Course restricted to students in a Sociology program and majors in Nursing or Leisure Studies; if space permits, other students may

receive instructor's permission to register) (NOTE: Students must register for a scheduled laboratory time.) (See Credit Limit, page 15) (3-1)

SOCI 375 (3) ADVANCED METHODS OF SOCIOLOGICAL RESEARCH
This course is a continuation of 211. Students will become familiar with basic issues in the philosophy of science and ways of knowing, as well as various strategies involved in research design, sampling, and measurement. (A major research project may be required) (*Prerequisite:* 211, or permission of the instructor) (3-0)

SOCI 381 (1½) SOCIOLOGY OF GENDER
An examination of the social import of gender in contemporary society. Includes evaluation of evidence of biological, psychological, and social differences and similarities between males and females; definitions of masculinity, feminity, and androgyny; gender power and socialization,; implications of gender for achievements in education, income and occupations; consideration of relevant sociological theory; and analysis of consequences of social changes affecting gender. (3-0)

SOCI 382 (½) HUMAN SEXUALITY
An examination of theories and practices of human sexual variance. Some varieties of sexuality to be studied will include heterosexuality, homosexuality, sado-masochism, pedophilia, and transsexual sexuality. Theories to be explored will include aetiologies of sexual behaviours and theories of the interplay of sex and gender with sexuality. (3-0)

SOCI 385 (1½) SOCIOLOGY OF AGING
A survey of sociological approaches to aging, including topics such as: cultural definitions of age; demographic trends and consequences; methodological problems in the study of aging; age stratification; retirement; death and dying. (3-0)

SOCI 390 (1½) SELECTED PROBLEMS IN SOCIOLOGY
Presentation of current interests of various faculty members. Students interested in this course should inquire at Registration when the course is to be offered and what the substantive presentation will involve. (Students may enroll in this course in different areas for a maximum of 3 units) (3-0)

SOCI 395 (1½) SPECIAL TOPICS IN CANADIAN SOCIETY
Detailed study of one or more limited aspects of Canadian society. Examples are sociological aspects of regionalism; recent social changes in Quebec; the position of original peoples; the changing status of women; protest movements; social structure and social policy. (3-0)

SOCI 401 (1½) SOCIOLOGY OF LAW
The interrelationships of law and other social institutions, socio-economic origins and class interests of legal functionaries, and law as social conflict are analyzed in Canadian and cross cultural contexts. (Prerequisites as stated on page 130 and either completion of 301 or fourth year standing.) (3-0)

SOCI 402 (formerly part of 300) (1½) CURRENT ISSUES IN SOCIOLOGICAL THEORY
Detailed study of particular recent developments or ongoing issues in sociological theory. Topics may vary from year to year to include either particular theoretical orientations — e.g., Marxism, exchange theory, symbolic interactionism — or particular theoretical issues in the discipline — e.g., micro-macro linkages, theory "groups" and boundaries, theoretical model building. (Not open to students who have completed 300) (*Prerequisite:* 302 or permission of the instructor.)

SOCI 403 (1½) SOCIOLOGY OF JUVENILE DELINQUENCY
A seminar course which concentrates on social theories of juvenile delinquency and related empirical evidence. (*Prerequisites:* 301 and 371) (3-0)

SOCI 404 (1½) THE INDIVIDUAL AND SOCIETY II
Current issues in sociological social psychology, involving detailed study of theories, methods and findings on such topics as justice and social behaviour, class consciousness, social dilemmas, and emotion. Topics may vary from year to year; students should consult the instructor or departmental handbook about the content of the course. (*Prerequisite:* 304 or permission of the instructor. May not be repeated for credit.) (3-0)

SOCI 418 (formerly ANTH 418) (1½) SOCIAL CHANGE
General history of cultural evolution and social change. The impact of complex cultures upon the native peoples of Africa, Asia, the Pacific and the Americas. (*Prerequisite:* 100, and ANTH 100A and/or 100B or 200 or permission of the instructor) (3-0)

SOCI 419 (ANTH 419) (1½) MODERNIZATION AND DEVELOPMENT
An examination of selected theories and research on development, underdevelopment, and dependency in the modern world; examples will be taken from various parts of the world, including Canada. (3-0)

SOCI 441 (1½) URBAN SOCIOLOGY
This course focuses on the sociological analysis of the city, with specific emphasis on the social aspects of urbanization, urbanism and urban problems. Topical areas include the examination of various urban institutions as well as selected aspects of the urban environment which are seen as important concomitants of urban problems. These include the supposed effects of congestion, housing patterns, social class differentials and their relationship to various problems such as crime, welfare, alcoholism, problems of the aged and a variety of other concerns. (3-0)

SOCI 443 (1½) (formerly 342, formerly 340) WORLD DEMOGRAPHY
Study of the growth, distribution and movement of the world's population with special emphasis upon the social causes of changes in patterns of fertility, mortality and migration and the social implications of these changes. (Students are strongly advised to complete 343 prior to taking 443.) (3-0)

SOCI 445 (1½) SOCIOLOGY OF HEALTH AND ILLNESS
Seminar in the social implications of illness, the health professions, systems of health care, and epidemiology. (3-0)

SOCI 471 (formerly 372) (1½) STATISTICAL ANALYSIS IN SOCIOLOGY: II
Briefly reviews material covered in 371 while introducing the use of SPSS on a computer, then covers multivariate analysis of sociological data. Primary emphasis is on multiple regression and related topics. Problems of data entry and documentation will also be covered. (*Prerequisite:* 371; if space permits, other students with equivalent background in statistics may receive instructor's permission to register) (See Credit Limit, page 15) (3-1)

SOCI 485 (PSYC 439) (1½) SEMINAR IN GERONTOLOGY
Offered in collaboration with the Department of Psychology; a course on the social and psychological aspects of gerontology; faculty members will present seminars on current research interests, and students will present seminars drawn from the following list of topics: physiological and neurological aspects of aging; cognitive functioning; personality; sexuality; work, retirement, and leisure; psychopathological aspects of aging; death and dying; widowhood; demographic trends and consequences, aging and the family; age stereotypes and discrimination; methodological and statistical problems in the study of aging and the aged. (*Prerequisite:* 385 or PSYC 339, or permission of instructor. Enrollment limited to 20 students) (3-0)

SOCI 490 (1-3) DIRECTED STUDIES
This course may be submitted for an elective course in Sociology in the Fourth Year of the Honours Program with the permission of the Department.

SOCI 499 (3) HONOURS SEMINAR AND GRADUATING ESSAY
Honours students are permitted to audit this seminar in the Third Year and are required to take the seminar for credit in the Fourth Year.

WOMEN'S STUDIES

Jennifer Waelti-Walters, B.A. (Lond.), L. ès L. (Lille), Ph.D. (Lond.), Professor (French), Director
Christine St. Peter, B.A. (Tor.), M.A. (York), Ph.D. (Tor.), Associate Professor
Michele Pujol, D.E.E.S. (Paris I, Pantheon-Sorbonne), Dip. H.E.C.J.F., M.A. (Wash.), Ph.D. (S. Fraser), Assistant Professor

Women's Studies Program Committee:
Pam Duncan, B.A. (Wis.), M.A. (Chic.), Ph.D. (Wis.), Associate Professor, Psychology. Term expires July 1, 1991
Smaro Kamboureli, B.A. (Aristotelian U.), M.A., Ph.D. (Man.), Assistant Professor, English. Term expires July 1, 1992
Katherine Teghtsoonian, B.A. (Brit. Col.), M.A., Ph.D. (Stan.), Assistant Professor, Political Science. Term expires July 1, 1992
E. Patricia Tsurumi, B.A. (Brit. Col.), A.M., Ph.D. (Harv.), Associate Professor, History. Term expires July 1, 1991

A Major Program leading to the bachelor's degree is offered, but the Major can be taken only as a double Major or as a Joint Honours and Major with a second program. The interdisciplinary Women's Studies Program is designed to provide students with a broad perspective on the variety of women's history, experience and thought, as well as introducing students to the new feminist scholarship in traditional academic disciplines. Although a number of departments have developed curricula that provide their students with methods of addressing gender or women's issues from a particular disciplinary perspective, the role of Women's Studies is to integrate the knowledge and methodologies from a wide range of viewpoints.

Students are required to combine studies in a traditional discipline with their Women's Studies Program in order to obtain a degree notation that includes Women's Studies. Students may undertake the Major in Women's Studies together with a Major program (see Double Major, page 36) in another department, or with a Major in another Faculty (see Interfaculty Double Major, page 36). These programs lead to a bachelor's degree. A General Program leading to a B.A. is also offered. By completing the requirements for the General Program together with a Major or Honours Program in another department or faculty, students may obtain a Minor (see Minor and Interfaculty Minor, page 36). Students interested in pursuing a program in Women's Studies should consult with the Program Director as soon as possible.

GENERAL PROGRAM

3 units of 200A, 200B, or SOCI 316 (by approval of the Director of Women's Studies)
300A, 300B
400A, 400B
3 units, chosen from List A or B below.

MAJOR PROGRAM

3 units of 200A, 200B, or SOCI 316 (by approval of the Director of Women's Studies)
15 units of upper level credit, as follows:
300A, 300B
Minimum 3, maximum 6 units of 380 (see note below)
3 units of 400A, 400B
Minimum 3, maximum 6 units chosen from List A or B below.

LIST A

CHIN 306 (1½) The Literature of the People's Republic of China (1949 to the Present)
CLAS 335 (1½) Women and the Family in Classical Antiquity
ENGL 399 (1½) Women and Literature
FREN 488F (1½) Women Writers
HIST 358A (1½ or 3) Women in Canada
HIST 365A (1½) Social and Cultural History of Modern Europe: 1770-1848
HIST 365B (1½) Social, Cultural, and Political History of Modern Europe: 1848-1914
HIST 437 (PACI 437) (1½) Japanese Women from the 6th to the 20th Century
SOCI 305 (3) Sociology of Families and Households
SOCI 316 (1½) Social Movements (if not taken above)
SOCI 381 (1½) Sociology of Gender
WS 490 (1½ or 3) Directed Studies

LIST B

These courses have variable content. Students must obtain approval from the Director if they wish to use any of the following toward their Women's Studies program requirements. Students should consult the department about offerings for the following year.
ENGL 372 (1½) Special Studies in 18th Century Literature
ENGL 385 (1½) Special Studies in 19th Century English Literature
ENGL 388 (1½) Special Studies in 20th Century British Literature
ENGL 462 (1½) Studies in Modern Critical Theory
FREN 488G (1½) Studies in a Major Author or Movement
ITAL 479A (SPAN 479A) (1½) Topics in Hispanic and Italian Literature
PHIL 408 (3) Contemporary European Philosophy
POLI 411 (1½) Women and Public Policy in Comparitive Perspective
POLI 468 (1½) Politics of Canadian Feminism
PSYC 430 (3) Abnormal Psychology
SOCI 402 (1½) Current Issues in Sociological Theory

NOTES:

1. WS 380 will be offered with 4 different topics over a two year period. Major students must take 3 units of 380 and may take a maximum of 6 units. General students are urged to take at least 1½ units of 380. When WS 380 is also offered under another number, e.g. HIST/PACI 437, students may not take the course a second time for credit in another department.
2. Courses in Women's Studies topics are offered from time to time at short notice in various departments. Any student wishing to include such a course as part of the requirements for the Women's Studies Program must obtain prior approval from the Director of the Women's Studies Program.
3. If any of the above upper level courses in other disciplines form part of a student's General, Major or Honours program in another department, they cannot also be used to fulfill the Women's Studies requirements.
4. Full descriptions and prerequisites for the courses listed above in Lists A and B are found under the departments offering the courses.

The Division of University Extension offers nondegree courses on a variety of themes within Women's Studies. For more information call University Extension, Women's Studies Program Coordinator, local 8451.

WS 200A (1½) WOMEN IN SOCIETY: PAST AND PRESENT

This is an interdisciplinary and cross cultural course about women and their roles in society. Using an African novel as starting point, the course raises a number of feminist issues. Historical, anthropological, biological, and philosophical sources will be examined as appropriate.
M. Pujol, C. St. Peter and others F(3-0)

WS 200 B (1½) WOMEN IN SOCIETY: PRESENT AND FUTURE

In this interdisciplinary and cross cultural course, a North American utopian novel will provide the basis for analysis of contemporary women's experiences and of theoretical models for change. Some assumptions and research models that feminist scholarship brings to the study of psychology, political science, linguistics, sociology, and education will be examined.
M. Pujol, C. St. Peter and others S(3-0)

WS 300A (1½) CLASSIC FEMINIST TEXTS: I

An interdisciplinary and multicultural approach to the issues of justice, work and power as discussed by major feminist writers through the ages and across the world. (*Prerequisite:* 200A or 200B, or permission of the instructor)
M. Pujol FS(3-0)

WS 300B (1½) CLASSIC FEMINIST TEXTS: II
An interdisciplinary and multicultural approach to the questions of language, body, and spirit as presented in major feminist works. (*Prerequisite:* 200A or 200B, or permission of the instructor)
J. Waelti-Walters, D. Gregory FS(3-0)

WS 380 (1½) TOPICS IN WOMEN'S STUDIES
An intensive study of selected aspects of Women's Studies. (Students are advised to consult the Program Director for information regarding the subjects to be considered. May be taken for credit more than once in different topics with permission of the Director of the Program.) (*Prerequisite:* One of 200A, 200B, 300A, 300B; or permission of the director of the program) (3-0)
S01 Women in 20th Century Ireland
A study of the conditions of Irish women's lives, examined through literary, sociological and historical sources.
C. St. Peter S(3-0)
S02 Simone de Beauvoir, Feminist?
An exploration of the complexity of Beauvoir's thought, the variety of her attitudes, the importance and the problematic nature of her "feminism."
J. Waelti-Walters S(3-0)
S03 (HIST 439/PACI 439) 11th Century Japanese Court: Women's Diaries
E.P. Tsurumi S(3-0)

WS 400A (1½) THEORY AND RESEARCH METHODS
A study of feminist theories and research methods in a variety of fields. Faculty involved in similar work will be invited to participate. This course is preparatory for 400B. (*Prerequisite:* 300A and B, or permission of the instructor)
C. St. Peter F(3-0)

WS 400B (1½) SEMINAR ON RESEARCH PROBLEMS
Students will undertake an extended research project on a subject of their choice. Class will meet weekly to discuss research problems. Faculty involved in similar work will be invited to participate. (*Prerequisite:* 400A)
M. Pujol, C. St. Peter S(3-0)

WS 490 (1½ or 3) DIRECTED STUDIES
Supervised study in some area of Women's Studies to be determined by the student and the instructor; written assignments will be required. (May be taken more than once to a maximum of 6 units) (3-0)

FACULTY OF EDUCATION

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FACULTY AND OTHER OFFICERS

Robert H. Fowler, B.A., M.A. (Queen's), Ph.D. (Duke), Dean of the Faculty
Beverly A. Timmons, B.A. (Chico St. Coll.), M.S., D.Ed. (Ore.), Associate Dean
Richard L. Williams, B.S. (St. Cloud St. Coll.), M.S. (Corn.), Ph.D. (Wash. State), Assistant Dean
Vernon J. Storey, B.Ed., M.Ed., Ed.D. (Brit. Col.), Director of Education Extension Programs
Gus M. Agostinis, B.A. (U. of Vic.), Program Assistant - Extension Programs
Eugene D. Deen, B.Sc. (U. of Vic.), Programmer
Noel Gantly, B.A., M.Ed., (Ott.), Ed.D. (B.Y.U.), Coordinator of Teacher Education Program at Okanagan College
Elisabeth D. Haythorne, Advising Officer
Wes Koczka, B.A., B.Ed., M.Ed. (Sask.), University Extension Program Coordinator
James B. London, B.A., M.A. (U. of Vic.), Ed.D. (Seattle), Coordinator of Teacher Education Program at Malaspina College
Diana F. McBratney, C.D., Advising Officer
Thomas J. Miller, B.Comm., B.Ed. (St. F.X.), M.Ed. (U. of Vic.), University Extension Program Coordinator
Betty Irene Obee, Advising Assistant
Elizabeth Rush, B.A. (U. of Calg.), Program Assistant - Extension Programs

DEPARTMENT OF ARTS IN EDUCATION

R. Dale McIntosh, A.R.C.T. (Tor.), B.Ed. (Alta.), M.Ed. (Sask.), M.Mus. (Alta.), Ph.D. (Wash.), Associate Professor and Chair of the Department
Franklin E. Churchley, A.R.C.T., L.R.C.T. (Royal Cons. Music), B.Mus. (Tor.), M.A., Ed.D. (Col.), Professor
Noel T. Gantly, B.A., M.Ed. (Ott.), Ed.D. (B.Y.U.), Associate Professor
Geoffrey S. Hodder, B.Ed., M.A. (U. of Vic.), Associate Professor
William M. Zuk, B.Ed., B.A., M.Ed. (Alta.), Ph.D. (Ore.), Associate Professor
Laurie R. Baxter, B.A., M.Ed. (West. Wash. St.), Ph.D., (Ohio St.), Assistant Professor
Donald L. Bergland, B.A., M.A., Ed.D. (Brit. Col.), Assistant Professor
Betty A. Hanley, B.A. (W. Ont.)., M.Mus. (Wayne St.), Ph.D. (Minn.), Assistant Professor
Gerald N. King, B.Mus. (Brit. Col), M.Mus. (W. Wash.), Assistant Professor

Visiting, Adjunct and Cross-listed Appointments:

Ian McDougall, B.Mus., M.Mus. (Brit. Col.), Assistant Professor (School of Music) (1990-92)
Kathleen Anderson, B.Ed. (Calg.), M.Ed. (U. of Vic.), Visiting Lecturer (1990-91)
Carolyn F. Kunzman, B.Ed. (Sask.), M.Ed. (Nan.), Visiting Lecturer (1990-91)
Moira E. Szabo, B.Mus., M.A. (McG.), Visiting Lecturer (1990-91)

DEPARTMENT OF COMMUNICATION AND SOCIAL FOUNDATIONS

Peter O. Evans, B.Ed., M.Ed., Ph.D. (Alta.), Professor and Chair of the Department
W. John Harker, B.A. (Brit. Col.-Vic. Coll.), M.A. (Wash.), Ed.D. (Brit. Col.), Professor
Christopher E. Hodgkinson, B.Sc. Econ. (Lond.), M.Ed., Ed.D. (Brit. Col.), Professor
Terry D. Johnson, B.Ed., M.A., Ed.D. (Brit. Col.), Professor
Norma I. Mickelson, B.Ed. (Brit. Col.-Vic. Coll.), M.A. (U. of Vic.), Ph.D. (Wash.), Professor
Lloyd O. Ollila, B.S., M.A., Ph.D. (Minn.), Professor
Arthur V. Olson, B.S. (Mass. St. Coll.), M.S. (Mass.), Ed.D. (Bost.), Professor
Sheilah M. Allen, B.A., M.A., Ed.D. (Brit. Col.), Associate Professor
Thomas Fleming, B.A., M.A. (U. of Vic.), Ph.D. (Ore.), Associate Professor
Yvonne M. Martin-Newcombe, B.A., Dip.Ed. (W. Indies), M.A., Ph.D. (McG.), Associate Professor
Margie I. Mayfield, B.A. (Macalester Coll.), M.A., Ph.D. (Minn.), Associate Professor
Peter J. Murphy, B.A. (Winn.), B.Ed., M.Ed. (Man.), Ph.D. (Alta.), Associate Professor
Antoinette A. Oberg, B.A., M.A. (Wash.), Ph.D. (Alta.), Associate Professor
Geoffrey D. Potter, B.A., M.A. (Sir G. Wms.), Ph.D. (Sheff.), Associate Professor
Vernon J. Storey, B.Ed., M.Ed., Ed.D. (Brit. Col.), Associate Professor
Robert J. Anthony, B.A., M.A. (Man.), Ph.D. (Tor.), Assistant Professor
Alison Preece, B.A. (Brit. Col.), M.A., Ph.D. (U. of Vic.), Assistant Professor
Margaret Robertson, B.Ed. (Leth.), M.Ed., Ph.D. (Sask.), Assistant Professor

Visiting and Adjunct Appointments:

Ted T. Aoki, B.Comm. (Brit. Col.), B.Ed., M.Ed. (Alta.), Ph.D. (Ore.), Adjunct Professor (1989-91)
Robert D. Armstrong, B.Ed., B.A., M.Ed. (Alta.), Ed.D. (Calif., Berk.), Adjunct Professor (1990-93)
James A. Maraj, B.A., Ph.D. (Birm.), Adjunct Professor (1990-92)
Laurence E. Devlin, B.Ed. (U. of Vic.), M.A., Ph.D. (Chic.), Adjunct Associate Professor (1989-91)
D. Gordon Thompson, B.Sc., M.A. (Man.), Ph.D. (Wis.), Adjunct Associate Professor (1989-91)
Bruce A. Andrews, B.A. (R.M.C.), M.A., Ed.D. (Brit. Col.), Adjunct Assistant Professor (1989-91)
David C. Bird, B.Ed. (Brit. Col.), M.Ed. (U. of Vic.), Ph.D. (Alta.), Adjunct Assistant Professor (1991-93)
Ian Cameron, B.Ed. (Brit. Col.), M.Ed. (U. of Vic.), Ed.D. (Brit. Col.), Visiting Assistant Professor (1990-91)
Richard J. Carter, B.A. (Brit. Col.), M.Ed. (W. Wash.), Adjunct Assistant Professor (1991-93)
Kenneth J. Fletcher, B.A., M.A. (U. of Vic.), Ed.D. (Seattle), Adjunct Assistant Professor (1991-93)
James B. London, B.A., M.A. (U. of Vic.), Ed.D. (Seattle), Visiting Assistant Professor (1990-91)
Theresa M.R. Richardson, B.F.A. (Calif.), Ph.D. (Brit. Col.), Visiting Assistant Professor (1990-91)
Roberta-Anne Smith, B.Sc. (N.Y. State), M.Ed. (Tor.), Visiting Assistant Professor (1990-91)
Donald R. Smyth, B.Ed. (Brit. Col.), M.Ed. (Alta.), Adjunct Assistant Professor (1989-91)
Alastair R.L. Glegg, B.A. (Rhodesia), M.Ed. (U. of Vic.), Visiting Lecturer (1990-91)

SCHOOL OF PHYSICAL EDUCATION

H. David Turkington, B.S., M.S. (Wash. St.), Dip. P.E. (Oslo), Ed.D. (Wash. St.), Professor and Director of the School
Gerald A. Carr, Dip. P.E. (Lough.), B.A., B.S., M.S. (Calif., L.A.), Ph.D. (Stell.), Professor
Martin L. Collis, Dip. P.E. (Lough.), M.S. (Idaho), Ph.D. (Stan.), Professor
David Docherty, B.S., M.S., Ph.D. (Ore.), Professor
Bruce L. Howe, Dip. Ed. (Dunedin Teachers' Coll.), B.S., M.S., Ph.D. (Ore.), Professor
John J. Jackson, Dip. P.E. (Carnegie Coll.), M.Sc. (Ott.), Ph.D. (Alta.), Professor
Howard A. Wenger, B.P.E., M.P.E. (Brit. Col.), Ph.D. (Alta.), Professor
Robert D. Bell, B.A. (Sask.), M.A., Ph.D. (Ore.), Associate Professor
Douglas R. Nichols, B.A. (Hope Coll.), M.S. (Ore.), M.A. (Mich. St.), Ph.D. (Ore.), Associate Professor
Leslie H. Peake, Dip. in P.E. (St. Paul's Coll., Brist.), M.Sc. (Springfield Coll.), Associate Professor
Geraldine H. Van Gyn, B.A. (W. Ont.), M.Sc. Ph.D. (Alta.), Associate Professor
Frederick I. Bell, B.A., B.Ed. (Sask.), M.Ed. (Alta.), Ed.D. (N. Car.), Assistant Professor
M. Dawn Large, B.Sc. (U. of Vic.), Senior Academic Assistant
Wendy Pethik, B.Sc., M.A. (U. of Vic.), Senior Academic Assistant
Dona L. Tomlin, B.Sc. (U. of Vic.), Senior Academic Assistant

Visiting and Adjunct Appointments:

Richard D.H. Backus, B.Sc., M.D. (Alta.), Adjunct Assistant Professor (1989-91)
J. Norgrove Penny, B.Sc., M.D. (Alta.), F.R.C.S. (C.), Adjunct Assistant Professor (1989-91)
Peter Viszolyi, M.D. (Brit. Col.), Adjunct Assistant Professor (1990-92)

DEPARTMENT OF PSYCHOLOGICAL FOUNDATIONS IN EDUCATION

Donald W. Knowles, B.A., B.Ed., Ph.D. (Alta.), Professor and Chair of the Department
Daniel G. Bachor, B.Ed., M.Sc. (Calg.), Ph.D. (Tor.), Professor
Rey A. Carr, B.A. (Calif., L.A.), M.A. (San Fran. St.), Ph.D. (Calif., Berk.), Professor
Che Kan Leong, B.A.(Hons.), M.A.(Ed.), (H.K.), Dip.Ed. Psych. (Queensland), Ph.D, (Alta), F.I.A.R.L.D., F.A.P.A., F.C.P.A., Lansdowne Professor of Education
Walter Muir, B.Ed., M.Ed., Ph.D. (Alta.), Professor
R. Vance Peavy, B.A., M.A. (Colo. St. Coll.), D.Ed. (Ore.), Professor
M. Honoré France, B.Sc. (Tenn.), M.Ed., Ed.D. (Mass.), Associate Professor
Brian Harvey, B.A. (Bran.), M.A., Ph.D. (Ohio St.), Associate Professor
Beverly A. Timmons, B.A. (Chico St. Coll.), M.S., D.Ed. (Ore.), Associate Professor
Ronald E. Tinney, B.A. (Brit. Col.), Ph.D. (Minn.), Associate Professor
Max R. Uhlemann, B.S., M.S., Ph.D. (Colo. St.), Associate Professor
John O. Anderson, B.Sc., B.Ed., M.Ed. (Man.), Ph.D. (Alta.), Assistant Professor
Lily Li-Chu Dyson, B.A. (Nat. Taiwan Normal), M.A. (Kan.), Ph.D. (Wash.), Assistant Professor
Geoffrey G. Hett, B.Ed. (U. of Vic.), M.S., Ph.D. (Ore.), Assistant Professor
Jennifer L. Hill, B.A. (New Br.), M.Ed. (Bost. Coll.), Ed.D. (N. Colo.), Assistant Professor
Dawn C. Howard, M.A., Ph.D. (S. Fraser), Assistant Professor

Visiting and Adjunct Appointments:

Gerald R. Guest, B.A. (Brit. Col.), M.A., Ph.D. (U. of Vic.), Adjunct Assistant Professor (1989-91)
James Ward, B.A. (Sheff.), Ph.D. (Manc.), Visiting Assistant Professor (1990-91)
Ross M. Young. B.Ed. (Brit. Col.), M.Ed. (Ariz.), Visiting Lecturer (1990-91)

DEPARTMENT OF SOCIAL AND NATURAL SCIENCES

Larry D. Yore, B.S., M.A., Ph.D. (Minn.), Professor and Chair of the Department (to June 30, 1991)
Irvin K. Burbank, B.Ed. (Alta), M.S., Ed.D. (Utah St.), Professor
Werner W. Liedtke, B.Ed., M.Ed., Ph.D. (Alta.), Professor
James H. Vance, B.Sc. (Alta.), M.A. (Wash.), Ph.D. (Alta.), Professor
Robert H. Fowler, B.A., M.A. (Queen's), Ph.D. (Duke), Associate Professor
John J. Sheppy, B.A., M.Ed. (Brit. Col.), Associate Professor
Paul F. Thomas, B.A., B.Sc. (Tor.), M.A. (Wat.), M.Ed., Ph.D. (Tor.), Associate Professor
Richard L. Williams, B.S. (St. Cloud St. Coll.), M.S. (Corn.), Ph.D. (Wash. St.), Associate Professor
Deborah Court, B.A., M.A., Ed.D. (Brit. Col.), Assistant Professor
Pierce Farragher, B.Sc., H.Dip.Ed. (N.U.I.), M.Ed. (Tor.), Ph.D. (Penn. State), Assistant Professor
Leslee G. Francis, B.Sc., M.A. (B.Y.U.), Assistant Professor
Theodore J. Riecken, B.A., M.Ed. (Sask.), Ph.D. (Brit. Col.), Assistant Professor
Gloria J. Snively, B.Sc. (Portland St.), M.A. (S. Fraser), Ph.D. (Brit. Col.), Assistant Professor

Visiting and Adjunct Appointments:

William K. Cross, B.Ed. (Brit. Col.), M.A., Ed.D. (Wash. St.), Adjunct Associate Professor (1989-91)

DIVISION OF PROFESSIONAL STUDIES

Ronald E. Tinney, B.A. (Brit. Col.), Ph.D. (Minn.), Director
Helen E. Bandy, B.A. (Brit. Col.), M.Ed. (U. of Vic.), Coordinator of School Experiences (Elementary)

PROGRAMS OFFERED BY THE FACULTY OF EDUCATION

UNDERGRADUATE PROGRAMS

1. BACHELOR OF EDUCATION (ELEMENTARY CURRICULUM) DEGREE

page 157

This is a five year program in elementary teacher preparation leading to a degree in Education and to teacher certification. The basic preparation is for classroom generalists, although some specialization is included. Students may begin the program at a regional college and transfer to the University for Year Two or Year Three. A Standard Certificate is available after Year Four on the Regular program; the degree and a Professional Certificate are granted after Year Five. The Physical Education Specialist program requires completion of the degree for initial certification which will be the Professional Certificate.

2. BACHELOR OF EDUCATION (SECONDARY CURRICULUM) DEGREE

page 162

This is a five year program leading to a degree in Education and to teacher certification. The degree requires specialization in one or two teaching subject areas normally taught in the public secondary schools of British Columbia. On completion of the degree the student is eligible for the Professional Certificate.

3. BACHELOR OF EDUCATION DEGREE

a. Elementary page 161

This is a two year post degree professional program for university graduates who wish to become elementary school classroom teachers. Completion of the program qualifies candidates for teacher certification and a degree in Education.

a. Secondary page 167

This is a two year post degree professional program for university graduates who wish to become secondary school teachers. Completion of the first year qualifies candidates for a teaching certificate. Those who complete the second year will qualify for a degree in Education.

4. BACHELOR OF ARTS DEGREE

a. Honours and Major in Human Performance page 169

This four year program offers a liberal arts and/or social science

perspective in the study of fitness, sport, and physically active life styles.

b. Major in Leisure Studies-Cooperative Education..... page 169

This four year program prepares students to enter the field of recreational administration and provides preparation in the planning, implementation and supervision of programs in a wide range of recreational settings. The leisure studies program is available only on a cooperative model basis.

5. BACHELOR OF SCIENCE DEGREE

a. Honours and Major in Human Performance..... page 170

b. Major in Human Performance-Cooperative Education page 171

This four year program offers a science perspective in the study of fitness, sport, and physical activity.

6. DIPLOMA IN SCHOOL LIBRARIANSHIP..... page 171

This is a 15 unit program (equivalent to one year) designed to prepare teachers to function as teacher librarians in either elementary or secondary schools.

7. CERTIFICATE IN KÓDALY METHODOLOGY ..... page 172

This is a 9 unit summer based program designed to prepare teachers of music at the elementary level in the principles and practices of the Kódaly methodology.

GRADUATE PROGRAMS

Graduate degrees in Education are offered through the Faculty of Graduate Studies. General information about these degrees may be found on pages 229 and 252 of this Calendar.

Inquiries should be directed to the Dean of the Faculty of Graduate Studies, the Associate Dean of the Faculty of Education, or the Education Departmental Graduate Advisers. Students seeking teacher certification are referred to pages 161 and 167.

1. MASTER OF EDUCATION DEGREE .....page 252

2. MASTER OF ARTS DEGREE.....page 252

3. MASTER OF SCIENCE DEGREE.....page 252

4. DOCTOR OF PHILOSOPHY DEGREE.....page 252

ACADEMIC ADVICE

Students needing advice about any of the undergraduate courses or programs offered in the Faculty of Education (including the Post Degree Professional Programs) should consult the Education Advising Centre, Room A250, MacLaurin Building, or write to that office for information.

All undergraduate students registered in the Faculty are required to make a commitment to a particular program. The Education Advising Centre will prepare a Record of Degree Program for each student based on current Faculty regulations. All previously completed work will be considered in relation to the student's choice of program and teaching areas. The Faculty reserves the right to review any program or course work that is ten or more years old. Additional work may be required if courses taken ten or more years ago are outdated.

All students are advised to confirm program requirements with the Advising Centre before registering in any session.

ADMISSION TO THE FACULTY OF EDUCATION

Applicants for admission to the Faculty of Education must meet general University requirements described on pages 7-12, as well as general Faculty and specific program requirements.

The University of Victoria reserves the right to limit enrollment in the Faculty of Education and to refuse admission to the various programs of the Faculty. Such factors as available space and facilities, teaching positions available in the schools, academic qualifications, general suitability of the applicant for teaching, physical abilities, and English usage will be taken into account.

GENERAL FACULTY ADMISSION

The general requirements for admission to the Faculty of Education are:

1. at least 12 units of credit including 3 units of English (except students who have successfully completed ENGL 099 may be admitted with 1.5 units of English); and
2. a sessional grade point average of at least 3.00 on the most recent session and, if that session is less than 12 units, a grade point average of at least 3.00 on a cumulative total of the most recent 12 units; and
3. admission interview (see below).

Specific program admission requirements are given under the description of each program.

INTERVIEW REQUIREMENT (Suspended 1991)

(Although the interview requirement is suspended for this year, individual interviews may be required as deemed appropriate by the Education Advising Centre.)

Those students seeking entry to the Faculty of Education for the first time and others who may be specifically referred, must be interviewed by personnel in the Faculty of Education for the purpose of judging suitability for the teaching profession. The interview program is scheduled for February through June. Appointments may be made by contacting the Education Advising Centre. Applicants whose place of residence makes it difficult to travel to Victoria for the interview should write to this office before the end of May to determine whether alternate arrangements may be made.

The professional judgement of those conducting the interviews will be deemed sufficient grounds for recommending the acceptance or rejection of an application. A candidate whose suitability for teaching is questioned by an interviewer will be referred to a Review Committee. Appeal procedures are available.

Teachers holding valid British Columbia teaching certificates or whose training and experience have been in Canada, U.S.A, U.K., Australia or New Zealand are exempt from the interview requirement.

Human Performance and Leisure Studies applicants are also exempt from this requirement.

QUOTA RESTRICTIONS

Admission to the Faculty of Education may be restricted by quotas. If quotas are placed on any year or program, not all qualified applicants will necessarily be accepted.

At the time of preparation of this Calendar (January 1991), maximum enrollments had been established for all professional years, the Elementary Programs, the Physical Education teaching area and the degree programs in Human Performance and Leisure Studies.

Selection criteria have been approved by the Senate. Further details are available from the Faculty of Education Advising Centre and the School of Physical Education.

ADMISSION TO PHYSICAL EDUCATION

Entry into all programs in the School of Physical Education is limited. The following programs are offered:

Bachelor of Education degrees in elementary and secondary teaching
Bachelor of Arts with honours or major in Human Performance
Bachelor of Arts with a major in Leisure Studies (Cooperative Education Program)
Bachelor of Science with honours or major in Human Performance

Bachelor of Science with a major in Human Performance (Co-operative Education Program)

Initial admission to any program in the School of Physical Education may be granted only after completion of at least one year of university level studies acceptable to the School of Physical Education and the Faculty of Education. In addition to completing all the requirements for admission to the School of Physical Education listed below, it should be noted that Faculty of Education regulations will apply to physical education students in all the programs except where specific programs have requirements that supersede those of the Faculty.

1. Students entering the University of Victoria from secondary school must register in the Faculty of Arts and Science and include:
   PE 141 Introduction to Human Anatomy
   PE 143 Introduction to Physical Education
   PE 115 Fitness and Conditioning
   Two other courses chosen from PE 105-125

During this first year, students apply for entry into physical education programs by completing an Application for Re-registration form and a Physical Education Supplementary Information form, available from Records Services after December 1. Detailed information about the physical education selection procedures is included with the Physical Education Supplementary Information form. **DEADLINE FOR RECEIPT OF THESE FORMS IN RECORDS SERVICES IS FEBRUARY 28.**

2. Students entering the University of Victoria from colleges/universities who wish to transfer directly into a physical education program must present the equivalents of:
   PE 141 Introduction to Human Anatomy
   PE 143 Introduction to Physical Education
   PE 115 Fitness and Conditioning
   Two other courses chosen from PE 105-125

Students who do not have these courses will be required to take a further year to complete them before applying for admission to physical education. Transferring college/university students apply for entry into physical education programs by completing an Application for Admission form and a Physical Education Supplementary Information form, available from Admissions Services after December 1. Detailed information about the physical education selection procedures is included with the Physical Education Supplementary Information form. **DEADLINE FOR RECEIPT OF THESE FORMS IN ADMISSION SERVICES IS FEBRUARY 28.**

LIMITATION OF CREDIT ON PROGRAMS

Because of the accelerating rate of change in subject matter, students may not always receive full credit for work taken ten or more years earlier. The Faculty Admissions and Adjudication Committee will determine what credit for work already completed will be applied to the candidate's chosen program.

Applicants for admission or acceptance on a degree program who have completed basic professional training may be granted up to 18 units of credit for that professional training towards the Bachelor of Education degree. This is granted at the discretion of the Faculty Admissions and Adjudication Committee.

Teachers whose professional training was not completed within ten years prior to their application or reapplication to the Faculty must submit the following for the Committee's consideration:

1. resume of all teaching experience including dates, locations and grade levels, and indicating whether full time, part time, or substitution; and
2. copies of the most recent Superintendent's and/or Principal's Reports; and
3. letter(s) from Principal(s) attesting to teaching effectiveness in substitution roles if applicable; and
4. copy of Teacher's Card as issued by the Ministry of Education or the B.C. College of Teachers.

ACADEMIC REGULATIONS

STANDING

1. Sessional Grade Point Average

The sessional grade point average is based only on courses which have a unit value. Courses bearing the grade COM are ignored. A sessional grade point average is found by multiplying the grade points for all the grades, and dividing the total grade points by the total number of units.

2. Minimum Sessional Grade Point Average

Normally students in the Faculty of Education must obtain a grade point average of at least 3.00 on every session attended, otherwise they will be required to withdraw from the Faculty.

Post professional year students on Bachelor of Education degrees who do not obtain a sessional grade point average of at least 3.00 will be placed on academic probation. A student who is on academic probation and whose grade point average falls below 3.00 will be required to withdraw from the Faculty. A sessional grade point average of at least 3.00 is sufficient to remove a student from academic probation.

Human Performance and Leisure Studies Cooperative Education students who do not obtain a sessional grade point average of at least 3.50 will have their academic performance reviewed and may be placed on probation or required to withdraw.

Students who have been required to withdraw from the Faculty must appeal to the Faculty for readmission. Appeals should be submitted in writing to Records Services when applying for reregistration.

3. Certification

For the purpose of determining eligibility for a teaching credential, successful completion of the professional year, or professional component in the case of the post degree programs, requires a grade point average of at least 3.00 on all courses taken that are applicable to the professional year or professional component. Students who do not obtain an average of at least 3.00 will not be reported as eligible for certification, and normally will be required to withdraw from the Faculty.

Teachers accepted on the elementary degree program must obtain a grade point average of at least 3.00 on at least 30 units of courses required to complete Years One to Three in order to establish eligibility for a teaching credential.

WITHDRAWAL

The Faculty reserves the right at any time to require any student to withdraw from the Faculty where it believes on consideration of scholarship, professional fitness or professional conduct that the student is unsuited for the teaching profession. Unsatisfactory performance in professional seminars may be considered reason to require a student to withdraw from the Faculty.

REGULATIONS CONCERNING PRACTICA

General:

Through the Faculty of Education the University reserves the right to approve any school that provides placements for student practica, and to change any placement assigned to a student. The student, however, has the right to be informed in writing of the reasons for any change in placement. While the University accepts a responsibility to provide a sufficient number of practicum opportunities to serve the needs of all registered students, a student may be required to withdraw from a practicum course if none of the available practicum agencies will accept that particular student.

Dates:

The dates of practica will be established for each program, and will be announced to the students involved at the beginning of each term.

Attendance:

Regular attendance during practicum is required. Students are expected to notify the school whenever practicum appointments cannot be kept, and also to inform their Faculty Supervisor.

Unethical or Unprofessional Behaviour:

It is the responsibility of instructors to inform students of the criteria by which unethical or unprofessional behaviour will be judged in the practicum setting. Instructors who refuse students continued participation in a practicum for misconduct or repeated absence must immediately discuss the matter with the Director of Professional Studies, who shall then either inform the students of the conditions under which they may resume participation in the practicum or require them to withdraw from the practicum and inform them of the reasons for this in writing.

All students in the Faculty of Education placed in schools for teaching practica will be subject to the provisions of the *School Act* and the B.C.T.F. Code of Ethics. Any such student may be required to withdraw from a practicum for violation of any part of the *School Act*, or B.C.T.F. Code of Ethics or upon a written order from the Board of School Trustees in the district where the student is placed.

Denial and Withdrawal:

(a) Denial
Students will be denied the practicum experience if their pre-practicum preparatory work is considered unsatisfactory by the Director of Professional Studies.

(b) Required Withdrawal
Students may be required to withdraw from the practicum with a failing grade if their performance in the practicum or their practicum preparation is considered unsatisfactory by the Director of Professional Studies.

(c) Voluntary Withdrawal
Students seeking voluntary withdrawal from a practicum, whether permanent or temporary, must receive permission to do so from the Director of Professional Studies.

(d) Notification of Withdrawal
Students who withdraw voluntarily from a practicum must notify the Director of Professional Studies in writing. Students who are required to withdraw from a practicum must make an appointment to see the Director of Professional Studies.

Readmission:

If students who have withdrawn from a practicum for whatever reason later wish to reenter the practicum they must apply to the Faculty Admissions and Adjudication Committee for readmission to the course, and should not assume that readmission is guaranteed.

Appeals:

Students may follow regular appeal procedures within the Faculty.

CREDIT FOR PHYSICAL ACTIVITIES

Physical activity credit is limited as indicated below:

1. B.Ed degrees (elementary and secondary curricula)
   (a) Physical Education teaching areas and specialist program — the number of units specified in the individual degrees for activities.
   (b) Physical Education Concentration — 1½ units beyond the concentration.
   (c) Non-Physical Education teaching areas — 3 units.
2. B.A. degree in Human Performance — 1½ units beyond the program requirements.
3. B.Sc. degree in Human Performance — 1½ units beyond the program requirements.
4. B.A. degree in Leisure Studies — 1½ units beyond the program requirements.

GRADUATION REQUIREMENTS

Students should refer to the general statements on page 20 of this Calendar. In exceptional cases when programs do not include enough 300 or 400 level courses to satisfy 21 units in the degree, the Dean may approve the inclusion of courses at the 700 level. In addition, to be eligible for a Bachelor of Education degree, the candidate must normally have earned:

1. a passing grade in each of the courses comprising the degree program;
2. a grade point average of at least 3.00 on the work of the professional year;
3. a grade point average of at least 4.00 as specified on page 163 for the teaching areas on the secondary program;
4. a grade point average of at least 3.00 on all work taken subsequent to the professional year. Failed courses will be counted in computing the grade point average.

GRADUATING AVERAGE

The graduating average of a student in the Faculty of Education shall be determined as the weighted average of the grade point values of the letter grades (other than COM) assigned to 300, 400 and 700 level courses taken or challenged at this University and accepted for credit in the student's program in the Faculty. If the total unit value of all such courses does not exceed 30, all such courses will be included in the average. If the total exceeds 30, the average will be taken on a maximum of 30 units of such courses chosen so as to give the highest average, including, where necessary, the appropriate fraction of a course.

Except for B.A. and B.Sc. Honours programs (see pages 169-170), students whose graduating averages are 3.50 or higher will be placed in one of the following classes on the basis of the graduating average:

1. First Class, an average of 6.50 or higher;
2. Second Class, an average from 3.50 to 6.49.

CREDIT FOR STUDIES UNDERTAKEN AT OTHER INSTITUTIONS

Students who plan to undertake work at other institutions are required to seek prior approval from the Education Advising Centre if they wish such courses to be credited toward a degree at the University of Victoria.

Students are referred to the general University regulations on page 15.

PROFESSIONAL PREPARATION

SCHOOL EXPERIENCE, STUDENT TEACHING AND SEMINARS

School experience, student teaching and seminars form an integral part of the elementary and secondary programs. Requirements for these components of the Bachelor of Education elementary programs are outlined in the course descriptions of ED-P 197, 297, 397 and 797 and for the secondary programs in the course descriptions of ED-P398, 498 and the secondary curriculum, instruction and practicum courses.

Students should be aware that all arrangements for school experience and student teaching are made through the School Experience Office which is located in the MacLaurin Building.

Professional Year students should note that all elementary and secondary programs commence with school experience. Orientation and placement for these activities will take place on Tuesday, September 3, 1991. In order to provide for sufficient school placements it is necessary for each professional year applicant to apply for school experience on the form provided in the application package or available from the School Experience Office. The school experience form must be returned to Admission Services or Records Services together with other application forms by February 28.

All Education students undertaking school experience during the year must be prepared to travel to any school in the three local school districts of Victoria, Sooke and Saanich. In order to do this, students should budget an additional $100 to $150 for transportation. Because of the heavy use of the three local school districts for school experience in the fall and winter and because it is considered important that students gain experience in nonmetropolitan areas, students should note that they will be required to undertake the final practicum in April-May in selected districts outside the Victoria, Sooke and Saanich districts. Extra expense will be involved and students should budget accordingly.

Students should note that School Districts may refuse placements and require students to withdraw from practica for failure to abide by the School Act or the British Columbia Teachers' Federation Code of Ethics.

Students in professional years should be aware that they must complete requirements in the methods courses (700 level) before they will

be allowed to take practica in either the fall or the spring.

ELEMENTARY PROGRAMS

ED-P 197

Normally students will be required to have a two week school experience following final examinations. Transfer students taking ED-P 197 and 297 in the same academic year must complete ten weekly half day experiences in the schools as well as meeting the ED-P 297 school experience requirements.

ED-P 297

Requires a two week school experience following final examinations.

ED-P 797

During professional year, students begin in September with an orientation in a local school. This is followed by Tuesday morning visits to the same school in preparation for a six week practicum later in the Fall. The final six week practicum from April to mid May will be undertaken in selected districts across the Province.

SECONDARY PROGRAMS

ED-P 398

A school experience of ten half days in local schools. A two week post session practicum may be required.

ED-P 498

Requires a two week school experience following final examinations.

Secondary curriculum, instruction and practicum courses

The school experience component of the regular professional year commences in September with an orientation in a local school, followed by a six week practicum later in the Fall in the same school. The final six week practicum from April to mid May will be undertaken in selected districts across the Province.

Internship students follow a different practica format. Interns are in participating schools for the full school term from September until the end of June. Details are provided by the School Experience Office.

TEACHER CERTIFICATION

1. The College of Teachers

Current legislation requires that every person appointed or retained as a teacher in a public school be a member of the College of Teachers and hold a valid certificate of qualification issued by the College.

It is the responsibility of the teacher to make application to the Registrar of the College of Teachers for initial certification, or for a change in certification, and to provide all necessary documents.

Persons convicted of a criminal offense and considering a teaching career should write to the B.C. College of Teachers for clarification of their status before undertaking a teacher education program.

2. The Teacher Qualification Service

Salary categories for teachers are established by the Teacher Qualification Service upon application, and only when a British Columbia teaching credential has already been granted by the College of Teachers. Categories are assigned on the basis of completed years of academic and professional preparation. Partial years are not considered.

3. Procedures and Documentation

Application forms for the College of Teachers and the Teacher Qualification Service are available from Records Services or the School Experience Office, as well as directly from the agencies.

Transcripts in support of applications to these bodies should be ordered on the Report Application card available from Records Services, the Education Advising Centre or the School Experience Office.

BACHELOR OF EDUCATION (ELEMENTARY CURRICULUM)

ADMISSION REQUIREMENTS

1. Program Admission

Initial admission to the elementary degree program may be granted only after completion of at least one year of university level studies acceptable to the Faculty of Education.

The requirements for admission to the regular elementary programs are:

(a) admissibility to the university; and
(b) at least 12 units of credit including 3 units of English (except students who have successfully completed English 099 may be admitted with 1½ units of English); and
(c) a sessional grade point average of at least 3.00 on the most recent session and, if that session is less than 12 units, a grade point average of at least 3.00 on a cumulative total of the most recent 12 units; and
(d) fulfillment of the interview requirement designated by the Faculty (see page 154 for details), unless waived by an ED-P 197 Seminar Leader.

Teachers who wish to be accepted on this program with credit from other institutions including professional training, must first make application in the normal manner to University Admission Services as detailed on page 11 under Application for Admission, number 4. Those whose studies commenced more than ten years ago are also referred to the section entitled Limitation of Credit on Programs on page 155.

2. Year Three Admission

In order to be acceptable for registration in Year Three of this program students must have at least 3 units of English in addition to the above requirements.

3. Professional Year Admission

The requirements for admission to the professional year of any of the elementary programs described below are:

(a) Applications must be submitted to Records Services no later than February 28.
(b) All courses specified for the preprofessional years of any program must be complete.
(c) A grade point average of at least 3.00 (UVic C+) must have been obtained on
(i) the most recently completed session; and
(ii) the most recent two years of at least 30 units.

Normally all of the above requirements must be complete by April 30 of the year in which an applicant wishes to begin the professional year. Any applicants unable to meet this deadline who wish to complete requirements during the summer session must write to the Faculty Admissions and Adjudication Committee, c/o the Education Advising Centre, indicating why they believe their circumstances to be unusual, and requesting permission to be considered for admission on the basis of the results of their work during the summer period. The Committee will not accept work completed during the summer to raise a deficient grade point average, but may accept courses taken to meet requirements when the grade point average is already sufficient.

Applicants for the professional year should be aware that the Faculty of Education has maximum enrollment limits and that therefore all qualified applicants are not guaranteed acceptance. Applicants will be notified regarding their admissibility as soon as possible, but final acceptance may not be until late July.

September 3, 1991 is the *firm* deadline for registration in the professional year.

PROGRAM

1. General

The elementary program provides course work and practicum experience designed to produce a well qualified elementary school teacher. The program leads to teacher certification in British Columbia. Certification is required for employment in the public school system. On conclusion of the program, the degree Bachelor of Education (Elementary Curriculum) is granted by the University of Victoria.

The program is available in a number of formats. The format a student will follow is determined to a certain extent by the amount of credit the student has accumulated prior to acceptance. One variation is provided specifically for students who want to complete the first two years at a regional college. Two variations are provided for students in physical education. These formats are described in further detail below.

Basically the program calls for completion of specified academic courses (Arts and Science courses), professional courses (Education courses), and further work in a specialization. Specialization is available in a number of different teaching areas and concentrations, also described below. In many cases there is room in the program for electives (courses of the student's choice).

Required courses in Education ..... 36½-41 units
Required courses from other faculties ..... 15 units
Teaching area/concentration/electives ..... 21-25½ units

It should be noted that a minimum of 21 units in this degree must be upper level courses, i.e. courses numbered at the 300 or 400 level.

Particular attention should be paid to the grade point average requirements of the Faculty (see page 155). A grade point average of at least 3.00 must be obtained on all sessions attended in order to remain in the Faculty and to proceed from year to year.

Graduation requirements are found on pages 20 and 156.

2. Professional Year

In each of the formats below, one of the years is designated the professional year. This year is devoted mainly to a study of the curriculum and methods of instruction for the elementary school and to lengthy periods of practice teaching in school classrooms. Certification is possible on successful completion of this year.

The special admission requirements for this year (see Professional Year Admission above) should be noted.

Prior to entry students must decide whether they wish to teach primary, i.e. grades one to three, or intermediate, i.e. grades four to seven. Wherever possible, practica placements will be made according to the student's choice. Having taken practica at one level does not restrict one to teaching at that level.

The professional year is a coordinated program of courses that may be offered in two alternative patterns. The regular pattern begins in September and terminates mid May, and includes two six week periods of practica. The alternative internship pattern begins in July and terminates mid May, and includes a two month and a four month practicum.

The regular professional year will commence on Tuesday, September 3, 1991. All accepted students are required to attend a meeting in the MacLaurin Building where registration will be confirmed and seminars and school placements will be assigned. Students should be prepared to spend Wednesday, Thursday and Friday in local elementary schools.

Because of the classroom involvement off campus the scheduling of courses in this program is somewhat different from that of other courses. Deviations from the total professional year program, additions to or deferrals of courses, are not normally permitted. Permission of the Education Advising Centre is required for any exception.

3. Transfer Program

Qualified teachers who wish to transfer to this degree program should contact an Adviser in the Education Advising Centre for advice regarding course requirements. The program will be modified on the basis of previous training and experience. In cases where professional training was completed ten years ago or more, the Faculty of Education Admissions and Adjudication Committee will determine what credit may be applied to the degree program.

4. Program Formats

(a) Regular Program

This program is designed for students who plan to enter the Faculty in their second year, having completed first year in another faculty at UVic, in a college or in another university.

Those who wish may leave the program on completion of Year Four and seek employment as a teacher. The fifth year subsequently may be completed in a number of ways, e.g. through summer studies, extension, etc. Please note there is a time limit on acceptance of credit toward degrees.

Year One (Arts and Science/College)

ED-P 197	1½	
ENGL 115/116 or 121/122	3	
HIST 130 (or other Canadian history with permission of the Education Advising Centre)	3	
MATH 160 A/B or other approved mathematics	3	
Elective	3	
Elective(s) from faculties other than Education	3	16½

Year Two

[1]AE 101	2	
[2]ED-E 145A or approved physics	1½	
[2]ED-E 145B or approved earth science	1½	
[2]ED-E 145C or approved biology	1½	
ENGL 215	1½	
[3]ME 104	2	
PE 147	2	
THEA 150	1½	
Teaching area/concentration/electives	1½	15

Year Three

ED-B 331	1½	
ED-B 430	1½	
[4]ED-D 300	1½	
ED-D 305	3	
[4]ED-P 297	1½	
Teaching area/concentration/electives	6	15

Year Four: Professional Year

ED-B 359	1	
ED-B 748	1½	
ED-B 749	1½	
ED-D 337	1½	
ED-D 400	1½	
ED-E 743	2	
ED-E 745	2	
ED-E 746	1½	
ED-P 797	3	15½

Eligible for STANDARD CERTIFICATE

Year Five

ED-B 420, 423, 425, or 427	3	
ED-B 450 (Primary) or ED-B 451 (Intermediate)	1½	
Teaching area/concentration/electives	10½	15

Eligible for PROFESSIONAL CERTIFICATE

Total units for degree 77

Notes:

[1] Those who choose the Art Education teaching area should take AE 103 in lieu of 101.

[2] Students are expected to acquire background in each of the three areas of general science: biological, physical, and earth science.

An elective may be substituted for the biological science requirement if Biology 11 has been completed within the past ten years. An elective may be substituted for the physical science requirement if Physics 11 has been completed within the past ten years. An elective may be substituted for the earth science requirement if either Earth Science 11 or Geology 12 has been completed within the past ten years.

Contact the Education Advising Centre for approval of science courses other than those indicated. (Note that any of PE 141, 241A, or 241B will meet the biological science requirement.)

[3] Those who choose the Music Education teaching area must take ME 106 (1½ units) in lieu of ME 104 (2 units). The extra ½ unit will then become an elective.

[4] ED-D 300 and ED-P 297 should be taken concurrently in the year immediately preceding the Professional Year.

(b) Regular Program with Physical Education Teaching Area

Students who want physical education in the elementary program should consult an Adviser in the Education Advising Centre to determine whether they want the Regular Program with a concentration or a teaching area in physical education, or the Physical Education Specialist Program.

Acceptance in this program is limited (see page 154 under Admission to Physical Education).

Normally College students who wish acceptance in this program must plan to transfer to UVic for their second year.

Year One (Arts and Science/College)

ENGL 115/116 or 121/122	3	
HIST 130 (or other Canadian history with permission of the Education Advising Centre)	3	
MATH 160 A/B or other approved mathematics	3	
[1]PE 115 plus two activities	1½	
PE 141	1½	
PE 143	1½	
PE 147	2	15½

Year Two

[2]ED-E 145A	1½	
[2]ED-E 145B	1½	
ED-P 197	1½	
ENGL 215	1½	
ME 104	2	
PE 345	1½	
Approved PE activities	1½	
Elective	3	
THEA 150	1½	15½

Year Three

AE 101	2	
ED-B 331	1½	
ED-B 430	1½	
[3]ED-D 300	1½	
ED-D 305	3	
[3]ED-P 297	1½	
PE 241B	1½	
PE 446	1½	
Approved PE activities	1½	15½

Year Four: Professional Year

ED-B 359	1	
ED-B 748	1½	
ED-B 749	1½	
ED-D 337	1½	
ED-D 400	1½	
ED-E 743	2	
ED-E 745	2	
ED-E 746	1½	
ED-P 797	3	15½

Eligible for STANDARD CERTIFICATE

Year Five

ED-B 420, 423, 425, or 427	3	
ED-B 450 (Primary) or ED-B 451 (Intermediate)	1½	
PE 344	1½	
PE 346	1½	
Approved PE activities	1	
Electives from faculties other than Education	3	
[4]Electives	3½	15

Eligible for PROFESSIONAL CERTIFICATE

Total units for degree 77

Notes

[1] The following activity courses are required:
(a) 106, 107, 109, 110, 114, 115;
(b) 2½ units selected from 104-132 or 461 courses (only one of 126-132 may be chosen; students who do not possess a valid Bronze Medallion Certificate must take 105).

[2] See Note 2 under Regular Program.

[3] ED-D 300 and ED-P 297 should be taken concurrently in the year immediately preceding the Professional Year.

[4] Only 6 units of activity credit may be applied to this degree.

(c) Transitional Program

This program is intended for students who plan to attend a regional college to complete the requirements of Years One and Two prior to coming to UVic to enter the Faculty of Education and the elementary program for their third year of studies. The course requirements of this program and of the Regular program are almost identical. The order in which the courses of the first three years are taken is different; the second level English requirement may be different; and the choice of teaching areas is more restricted. The Physical Education Teaching Area is not possible on a Transitional Program.

Years One and Two (College)

ENGL 115/116 or 121/122	3	
[1]ENGL 215 and THEA 150; or one of ENGL 200, 201, 202, 203	3	
HIST 130	3	
MATH 160 A/B or other approved mathematics	3	
Elective	3	
[2]Approved Laboratory Science	4½	
Electives/concentration/teaching area	10½	30

Year Three

AE 101	2	
ED-B 331	1½	
ED-B 430	1½	
ED-D 300	1½	
ED-D 305	3	
ED-P 197	1½	
ED-P 297	1½	
ME 104	2	
PE 147	2	16½

Year Four: Professional Year

ED-B 359	1	
ED-B 748	1½	
ED-B 749	1½	
ED-D 337	1½	
ED-D 400	1½	
ED-E 743	2	
ED-E 745	2	
ED-E 746	1½	
ED-P 797	3	15½

Eligible for STANDARD CERTIFICATE

Year Five

ED-B 420, 423, 425, or 427	3	
ED-B 450 (Primary) or ED-B 451 (Intermediate)	1½	
Concentration/teaching area/electives	10½	15

Eligible for PROFESSIONAL CERTIFICATE

Total units for degree 77

Notes

[1] An English competency examination will be required prior to acceptance in Year Four if a student does not complete ENGL 215 or does not have a grade of at least C+ in ENGL 115. College courses given transfer credit as "ENGL 200 level" are not normally acceptable in lieu of ENGL 200, 201, 202, or 203.

[2] Students are expected to acquire background in each of the three areas of general science: biological, physical, and earth science.

An elective may be substituted for the biological science requirement if Biology 11 has been completed within the past ten years. An elective may be substituted for the physical science requirement if Physics 11 has been completed within the past ten years. An elective may be substituted for the earth science requirement if either Earth Science 11 or Geology 12 has been completed within the past ten years.

Contact the Education Advising Centre for approval of science courses other than those indicated. (Note that any of PE 141, 241A, or 241B will meet the biological science requirement.)

Students who are having difficulty in meeting this requirement should consult an Adviser in the Education Advising Centre.

(d) Physical Education Specialist Program

This program is designed to prepare students to teach physical education as a broadly based specialty and to give leadership and coordination to the overall physical education program in an elementary school.

Acceptance in this program is limited (see page 154 under Admission to Physical Education).

Normally College students who wish acceptance in this program must plan to transfer to UVic for their second year.

Year One (Arts and Science/College)

ENGL 115/116 or 121/122	3	
HIST 130	3	
MATH 160 A/B or other approved mathematics	3	
[1]PE 115 plus two activities	1½	
PE 141	1½	
PE 143	1½	
PE 147	2	15½

Year Two

ED-P 197	1½	
ENGL 215	1½	
PE 345	1½	
Approved PE activities	2	
THEA 150	1½	
[2]Electives	7½	15½

Year Three

ME 104	2	
PE 241B	1½	
PE 344	1½	
PE 346	1½	
PE 442	1½	
PE 446	1½	
Approved PE activities	1½	
[2]Electives	4½	15½

Year Four

ED-B 331	1½	
ED-B 420, 423, 425, or 427	3	
ED-B 430	1½	
ED-D 300	1½	
ED-D 305	3	
ED-P 297	1½	
PE 443	1½	
PE elective	1½	15

Year Five: Professional Year

ED-B 359	1	
ED-B 748	1½	
ED-B 749	1½	
ED-D 337	1½	
ED-D 400	1½	
ED-E 743	2	
ED-E 745	2	
ED-E 746	1½	
ED-P 797	3	15½

Eligible for PROFESSIONAL CERTIFICATE

Total units for degree 77

Notes

[1] The following activity courses are required:
(a) 106, 107, 109, 110, 114, 115;
(b) 2 units selected from 104-132 or 461 courses (only one of 126-132 may be chosen; students who do not possess a valid Bronze Medallion Certificate must take 105).

[2] At least 7½ units of the 12 units of electives on this program must be chosen from courses other than PE in consultation with the Elementary PE Adviser. A maximum of 1½ units of additional activity credit may be accepted as elective credit.

TEACHING AREAS AND CONCENTRATIONS

Every elementary program except (b) and (d) above (Regular with Physical Education Teaching Area and Physical Education Specialist Program) must include the requirements of one of the following teaching areas or concentrations. With approval of the Dean of the Faculty, students may be recommended for a degree with a teaching area or concentration outside of those offered by the Faculty. Students who do not enter the program for second year will likely find their choice somewhat limited and should consult an Adviser in the Education Advising Centre for further information.

ART EDUCATION:

Area: AE 103; 200 or 201; 205 or 208; 315; 316 or 317; 320 or 321; 401 (1.5); 3 units of approved courses from Art Education offerings and/or HA 120 18

While AE 103 is strongly recommended, with permission of the Elementary Art Adviser AE 101 plus an additional course may be acceptable in lieu. A grade of B or higher is required on AE 103 (or 101). Courses chosen to complete this area must be approved by the Adviser.

Not all art education courses can be offered each year. Students may complete courses in a sequence of their own choice since there are no prerequisities. Students should consult with the Adviser.

Concentration: AE 200 or 201; 205 or 208; 315, 316 or 317; 320 or 321; 401 (1.5); 1.5 units approved by Elementary Art Adviser 9
(Core requirement — AE 101 or 103)

DRAMA IN EDUCATION:

Area: THEA 110, 181, 381, 330; ED-B 341, 360 ..... 16½

Concentration: THEA 181, 330, 381 9

EARLY CHILDHOOD EDUCATION:

Area — Primary Emphasis: ED-B 339*, 341, 342, 440; ED-D 306; 6 units of approved options¤ 15

Concentration — Primary Emphasis: ED-B 339*, 341, 342, 440; ED-D 306 9

Area — Pre-School/Kindergarten Emphasis: ED-B 339*, 440, 441, 448; ED-D 306; ED-E 447; AE 320; ME 302; 3 units of approved options¤** 15

Concentration — Pre-School/Kindergarten Emphasis: ED-B 339*, 440, 441, 448; ED-D 306; ED-E 4479

* Experienced teachers should consult with Early Childhood Education instructors to substitute an approved option.

One of ED-B 420, 423, 425 or 427 may be taken in Year Three in order to accommodate the above required area courses in Year Five.

** Only the 15 unit Pre-School/Kindergarten AREA meets requirements for certification as a supervisor by the Community Care Facilities Licensing Board.

EDUCATION TECHNOLOGY:

Concentration (only): ED-B 360, 361, 362, 463; ED-D 338, 438 9

ENGLISH AS A SECOND LANGUAGE:

Concentration (only): LING 360, 374, 375; ED-B 490 9

FRENCH LANGUAGE EDUCATION:

Area (only): FREN 180, 290, 302, 320, 350; ED-B 390 ..... 16½

INTERPERSONAL SKILLS:

Concentration (only): ED-D 414, 417, 433, 434 9

LANGUAGE ARTS:

Area: ED-B 342, 343A or B, 349, 442; 6 units of approved options¤ 15

It is strongly recommended that 6 units be chosen from a faculty other than Education.

One of ED-B 420, 423, 425 or 427 may be taken in Year Three in order to accommodate the required courses in Year Five.

Concentration: ED-B 341, 342, 343A or B, 349 9

LEARNING ASSISTANCE:

Area (only): ED-B 442; ED-D 316 or 417, 405, 415; ED-D 410A and/or 411A; ED-E 484; approved option¤ (if necessary) 15

One of ED-B 420, 423, 425 or 427 may be taken in Year Three in order to accommodate the required courses in Year Five.

MATHEMATICS EDUCATION:

Area: Core — 7½ units of approved mathematics*; ED-E 343, 438A, 443, 444 and 484 15

* A recommended sequence would be MATH 151, 102, 233A, 233C, C SC 110. Other approved courses are MATH 100, 101, 240, 362, 368A; C SC 115; STAT 250, 251.

Concentration: ED-E 343, 438A, two of 443, 444, 484; and 3 units from C SC 110, MATH 151, 233A, STAT 250, 251, ED-D 338 or other electives approved by the Elementary Mathematics Adviser 9

MATHEMATICS/SCIENCE:

Area (only): Core — MATH 151 and 102 (or 100); 3 units of approved lab science; 3 units of approved mathematics; ED-E 345B and 438A; two of ED-E 343, 443, 444, 484; 3 units from ED-E 345A, 445A, 445B, approved science 18

Mathematics and science courses must be approved by the Elementary Mathematics and Science Advisers.

MUSIC EDUCATION:

Area: ME 105, 106, 207 or 309, 208 or 308, 219, 300, 306; 6 units of approved music and/or music education 18

Students wishing to enter this area must first seek acceptance through the Department of Arts in Education. Satisfactory performance on a short musical aptitude test will also be required.

ME 104 may be acceptable for credit in lieu of ME 106 with permission of the Elementary Music Adviser.

Concentration: two of ME 207, 208, 300, 309; ME 306; one of ME 400B, 400C or approved Kodaly course; 1½ units of music education elective 9
(Core requirement — ME 104 or 106)

OUTDOOR EDUCATION:

Area (only:) ED-E 345A and B, 373; PE 270 7½ units of approved options¤ 13½

Students will choose options from approved courses in education, biology, geography, anthropology, or history. Selection must include courses in two of these subject areas.

PHYSICAL EDUCATION:

Area: Refer to page 135 for information regarding acceptance into this area. PE 106, 107, 110, 114, 115; *Any five 100 level activities or 461 courses; PE 141; PE 143; PE 147; PE 241B; PE 344; PE 345; PE 346; PE 446 18

* Only one of 126-132 may be chosen. Those who do not hold a valid Bronze Medallion Certificate must take 105.

Concentration: PE 143, 345, 346, 446; 3 units from PE 141, 241A, B, 341, 442, 445, three activities chosen from PE 105-125 9

REMEDIAL METHODOLOGY:

Concentration (only): ED-B 442; ED-D 411A, 415; ED-E 484 9

SCIENCE:

Area: Laboratory Science chosen from each of the following: 3 units of physics or chemistry (or with approval ED-E 145A and B); 1½ units of BIOL or MICR (or with approval ED-E 145C); 3 units of astronomy and/or Earth and Ocean Sciences (GEOG 203A or 203B with permission); ED-E 345B; 438A; 1½ units of approved science or science education; ED-E 445A and 445B 15

Concentration: ED-E 345B, 438A, 445A, 445B, and 3 units in science or science education approved by the Elementary Science Adviser 9

SOCIAL STUDIES:

Area: GEOG 101A and 101B (or approved higher level geography); HIST 130; 3 units from ANTH 100A, 100B, 200A, 200B, 321, 339A, 339B, SOCI 100; ED-E 346, 438A, 446; 4½ units of Approved Social Studies options¤ 18

The area must include a minimum of 9 units of upper level courses.

Concentration: ED-E 346, 438A, 446 and 4.5 units of social studies electives approved by the Elementary Social Studies Adviser 9

ACADEMIC SUBJECT AREAS: With approval of the Education Advising Centre, 15 unit teaching areas from a general program in Arts and Science may be acceptable.

OPTIONS: ¤
A list of approved options is available in the Education Advising Centre.

BACHELOR OF EDUCATION
POST DEGREE PROFESSIONAL PROGRAM — ELEMENTARY

ADMISSION

1. Admission to the Program and Year One

The deadline for receipt of application forms is February 28.

Applications will be considered from those who meet the following requirements:

(a) successful Faculty interview; and
(b) a degree from a recognized university acceptable in content to the Faculty of Education Admissions and Adjudication Committee; and
(c) a grade point average of at least 3.00 (UVic C+) on the most recent session and on the most recent two years (30 units) attempted; and
(d) academic preparation which includes the following:

[1] Approved English ..... 3 units
[2] Canadian history ..... 3 units
[3] Approved mathematics ..... 3 units
[4] Approved laboratory science ..... 3 units

[1] The Faculty requires students to demonstrate competency in written English. This may be satisfied by ENGL 115 with a grade of at least C+ or 215 as part of the required 3 units, or by completion of the ENGL 115 equivalency examination in addition to the 3 units of approved English.

[2] Not required if applicant presents Bachelor of Music with Major in Music Education (Elementary) from the University of Victoria.

[3] The approved mathematics must normally have been completed within the past ten years.

[4] General science, biology, physics, chemistry, astronomy, geology, completed within the past ten years. Not required if the applicant presents a Bachelor of Music with Major in Music Education (Elementary) from the University of Victoria.

Students of exceptional ability who do not meet the stated admission requirements may appeal to the Faculty Admissions and Adjudication Committee for consideration. "Exceptional" may be considered in terms of high grade point average, relevant work experience, or unique academic qualifications.

Transcripts showing completion of all of the above requirements must

be received in the Education Advising Centre by May 31 of the year of application.

Maximum enrollments have been established; therefore the Faculty cannot guarantee that all qualified candidates will be accepted. Accepted candidates will be notified as early as possible, but final acceptance may not be until late July.

2. Admission to Year Two

The deadline for receipt of application forms is February 28.

All course requirements of Year One must be complete with a grade point average of at least 3.00 by April 30 of the year of application. Requests for extension of this deadline will be considered by the Admissions and Adjudication Committee only if the applicant's current session grade point average is at least 3.00.

PROGRAM

1. General

The elementary post degree professional program provides course work and practicum experience designed to produce a well qualified elementary school teacher. This program, which follows an acceptable undergraduate degree, leads to teacher certification. Certification is required for employment in the public school system. On conclusion of the program, the degree Bachelor of Education is granted by the University of Victoria.

The program is designed to be taken over two consecutive winter sessions. With permission of the Admissions and Adjudication Committee, the first year, or preprofessional year, may be extended and taken part time over more than one winter session. The courses required in this year are scheduled according to the normal University timetable and extend from the beginning of September to the normal examination period in the following April. In addition a two week practicum is required following examinations.

It should be noted that the Faculty of Education requires a grade point average of at least 3.00 on all sessions attempted. Any session in which the average falls below 3.00 will result in a requirement to withdraw from the program and the Faculty. Neither certification nor the degree will be awarded if the Year Two grade point average is less than 3.00.

Graduation requirements are found on pages 20 and 156.

2. Professional Year

The professional year is a coordinated program of courses devoted mainly to a study of the curriculum and methods of instruction for the elementary school and to lengthy periods of practice teaching in school classrooms. Because of the integration of the methods courses with the two practica, one in November/December and the other in April/May, it is required that this year be taken as a complete unit over one winter session. Because the scheduling of courses in this year is not necessarily consistent with the University timetable, permission must be obtained from the Education Advising Centre to add any other course.

Prior to entry students must decide whether they wish to teach primary, i.e. grades one to three, or intermediate, i.e. grades four to seven. Wherever possible, practica placements will be made according to the student's choice. Having taken practica at one level does not restrict one to teaching at that level.

The professional year will commence on Tuesday, September 3, 1991. All accepted students are required to attend a meeting in the MacLaurin Building where registration will be confirmed and seminars and school placements will be assigned. Students should be prepared to spend Wednesday, Thursday and Friday in local elementary schools.

3. Program Formats

(a) Regular Program

Year One: Preprofessional Year

AE 101	2	
ED-B 320 or other approved foundations	1½	
ED-B 331	1½	
ED-B 359	1	
ED-B 430	1½	
ED-D 300	1½	
ED-D 305	3	
ED-P 297	1½	
ME 104	2	
PE 147	2	17½

Year Two: Professional Year

*ED-B 450 or 451	1½	
ED-B 748	1½	
ED-B 749	1½	
ED-D 337	1½	
ED-D 400	1½	
ED-E 743	2	
ED-E 745	2	
ED-E 746	1½	
ED-P 797	3	16
Total units for degree		33½

Eligible for CERTIFICATION and DEGREE

* Students enrolled in primary methods courses must take ED-B 450; those enrolled in intermediate methods courses must take ED-B 451.

(b) Special Music Program

This program is only for students who hold a Bachelor of Music degree with Major in Music Education (Elementary) from the University of Victoria.

Year One: Professional Year

*ED-B 450 or 451	1½	
ED-B 748	1½	
ED-B 749	1½	
ED-D 305	3	
ED-D 337	1½	
ED-D 400	1½	
ED-E 743	2	
ED-P 797*	3	15½

Eligible for CERTIFICATION

* Students in the Special Music Program will be placed in the music seminar in ED-P 797. The seminar sessions will operate as other 797 seminars with music content as a focus for discussion although other subject areas will be integrated to meet student needs.

Year Two: Degree Completion

ED-B 342 and 343A or 343B, or 349	3	
ED-E 345A	1½	
ED-E 346	1½	
Approved AE	1½	
Approved PE	1½	
Electives	6	15
Total units for degree		30½

Eligible for DEGREE

* Students enrolled in primary methods courses must take ED-B 450; those enrolled in intermediate methods courses must take ED-B 451.

BACHELOR OF EDUCATION (SECONDARY CURRICULUM)

ADMISSION REQUIREMENTS

1. Program Admission

Initial admission to the secondary degree program may be granted only after completion of at least one year of university level studies acceptable to the Faculty of Education.

The requirements for admission to the secondary program are:

(a) admissibility to the university; and
(b) at least 12 units of credit including 3 units of English (except students who have successfully completed English 099 may be admitted with 1½ units of English); and
(c) a sessional grade point average of at least 3.00 on the most recent session and, if that session is less than 12 units, a grade point average

of at least 3.00 on a cumulative total of the most recent 12 units; and
(d) fulfillment of the interview requirement designated by the Faculty (see page 154 for details).

Teachers who wish to be accepted on this program with credit from other institutions including professional training, must first make application in the normal manner to University Admission Services as detailed on page 11 under Application for Admission, number 4. Those whose studies commenced more than ten years ago are also referred to the section entitled Limitation of Credit on Programs on page 155.

2. Year Three Admission

In order to be acceptable for registration in Year Three of this program, students must have at least 3 units of English in addition to the above requirements.

3. Professional Year Admission

The requirements for admission to the professional year of the secondary program are:
(a) Applications must be submitted to Records Services no later than February 28.
(b) All courses specified for the preprofessional years of the program, with the exception of electives, must be complete. In addition candidates presenting a second language must pass an oral competency examination.
(c) The candidate must have obtained either
  (i) a grade point average of at least 4.00 (UVic B-) on the upper level courses of the two teaching areas, including prerequisites and corequisites (**NOTE:** where fewer than 9 units of upper level work has been completed in any one area, the grade point average will be calculated on the upper level courses plus one or more of the 200 level courses in that area, to a total of 9 units); or
  (ii) a grade point average of at least 4.00 (UVic B-) in the teaching area courses of Years Three and Four on any single expanded teaching area (NOTE: where fewer than 18 units of upper level work has been completed in the area in these years, the calculation will include sufficient courses from second year to total 18 units) and if the area is physical education expanded, or music expanded, a grade point average of at least 4.00 is required on the 7½ units of other area work.
(d) A grade point average of at least 3.00 (UVic C+) must have been obtained on
  (i) the most recently completed session; and
  (ii) the most recent two years of at least 30 units.

Normally all of the above requirements must be complete by April 30 of the year in which an applicant wishes to begin the professional year. Any applicants unable to meet this deadline who wish to complete requirements during the summer session must write to the Faculty Admissions and Adjudication Committee, c/o the Education Advising Centre, indicating why they believe their circumstances to be unusual, and requesting permission to be considered for admission on the basis of the results of their work during the summer period. The Committee will not accept work completed during the summer to raise a deficient grade point average, but may accept courses taken to meet requirements when the grade point average is already sufficient.

Applicants for the professional year should be aware that the Faculty of Education has maximum enrollment limits and that therefore all qualified applicants are not guaranteed acceptance. Applicants will be notified regarding their admissibility as soon as possible, but final acceptance may not be until late July.

September 3, 1991 is the *firm* deadline for registration in the professional year.

PROGRAM

This is a five year program leading to a Bachelor of Education (Secondary Curriculum) degree and professional teacher certification. The first four years are mainly concerned with academic preparation in two teaching subject areas or in a single expanded teaching subject area. The fifth year contains the professional preparation for teaching these subjects in the secondary schools. The teaching areas offered in this Faculty are described on pages 164 to 167. With approval of the Dean of the Faculty, students may be recommended for a degree with a teaching area regularly taught in the B.C. school system but outside of those offered by the Faculty.

The program ordinarily requires attendance at five winter sessions. However, depending on the choice of teaching area(s), students may transfer credit to this program from course work taken at B.C. regional colleges or elsewhere. It is suggested that advice be sought from the Education Advising Centre to ensure that courses taken will carry credit to the desired program. For those wishing a physical education teaching area, it is usually necessary to attend campus for Year Two. Details regarding acceptance in this area are found on page 154.

Year Five is the professional year in which students spend an extended time in the schools and take courses on campus that are directly related to their professional training. In order to gain admission to the professional year, it is necessary to meet the requirements as specified in the section above entitled Professional Year Admission. Normally all courses listed for this year are taken as a coordinated program during one full winter session. Because of the professional involvement off campus during this year, students are not normally permitted to take courses in addition to those specified. Any exceptions must have approval from the Education Advising Centre.

Students who complete this degree program with a grade point average of at least 3.00 on the professional year will be reported to the B.C. College of Teachers.

Teachers who are accepted on this program with credit from other institutions including professional training, should obtain a Record of Degree Program from the Education Advising Centre as soon as Admission Services has provided them with a Statement of Transfer Credit. This program will be modified on the basis of their previous training and experience. In cases where the professional training was completed more than 10 years ago, the Faculty Admissions and Adjudication Committee will determine what credit will be granted by Admission Services and what credit will be used toward the program.

Graduation requirements are shown on pages 20 and 156. The teaching area calculation used for graduation will be as for admission to the professional year, shown above.

COURSE REQUIREMENTS

The minimum degree requirement is successful completion of the following:

Required Education courses	22½ units
Required Arts and Science and Fine Arts courses	6 units
Teaching area(s) courses (including prerequisites and corequisites)	37½ units
Electives	9 units
TOTAL	75 units

PROGRAM BY YEARS

All students will register in a faculty other than Education in Year One. Advice may be obtained from the Education Advising Centre.

Year One (Arts and Science/College):

ENGL 115/116 or 121/122	3	
Courses to meet degree requirements	12	15

Year Two:

[1]ENGL 215	1½	
[2]THEA 150	1½	
Courses to meet degree requirements	12	15

Year Three:

ED-D 406	3	
[3]ED-P 398	1½	
Courses to meet degree requirements	10½	15

Year Four:

ED-D 401	1½	
ED-P 498	1½	
Courses to meet degree requirements	12	15

Year Five: Professional Year (Regular Option)

ED-B 343C	1½
ED-B 359	1
ED-B 420, 423, 425 or 427	3
ED-B 430	1½

ED-D 337 ..... 1½
ED-P 792 ..... ½
Approved Curriculum, Instruction and Practicum in Secondary School subject(s) 4½-6
Approved Education elective (if only one area) 1½-0 15

[1] Students on the English teaching area will take this course as part of the area and will substitute an elective in the core.

[2] Students on the Dramatic Arts teaching area will substitute an elective.

[3] Students in the Physical Education teaching area will not take this course.

NOTE: ALTERNATIVE PROFESSIONAL YEARS MAY NOT BE OFFERED EVERY YEAR

Year Five: Alternative Professional Year (Secondary Internship Program)

May-June
ED-B 420, 423, 425, or 427 3

July-August
ED-B 343C 1½
ED-B 430 ..... 1½
ED-D 337 ..... 1½
ED-P 777 ..... 1½

September-June
Approved Curriculum, Instruction and Practicum in Secondary School subjects 4½-6
ED-P 793 ..... 1½ 15-16½

This program is not available to students with art or dramatic arts as a teaching area.

Year Five: Alternative Professional Year (Music) *

ED-P 799A 9
ED-A 762 3
Approved Curriculum, Instruction and Practicum in other teaching area 3 15

* restricted to applicants who have completed the music teaching area; format in 1991-92 may differ from that described above.

Total Units for Degree ..... 75 or 76½

Eligible for PROFESSIONAL CERTIFICATE

TEACHING AREAS (SECONDARY)

Students will choose either two teaching areas or one expanded teaching area from those described on the following pages.

The following are usual combinations of teaching areas taken by students on the Secondary regular program:

1. any two of mathematics, chemistry, physics or biology;
2. mathematics or biology in combination with physical education;
3. any two of English, French, German, art, music, dramatic arts, geography, history, physical education, social studies, mathematics.

Any student wishing to take a combination of teaching areas not listed above should consult the Education Advising Centre.

Where two teaching areas are chosen, the minimum number of units required in each area is 15. In addition to these 30 units a total of 7½ units are required, to be made up of corequisites and additional area courses.

Where one expanded area is chosen, 37½ units of area and corequisite work are required.

Exceptions to any of the following subject and course requirements may be permitted only with prior permission of the Education Advising Centre.

The nine units normally reserved for electives may be used to strengthen a teaching area.

ART

Corequisite:
ENGL 200, 201, 202, 203, 250, or HA 120 ..... 3 3

Area:
AE 103 3
AE 200 ..... 1½
AE 201 ..... 1½
AE 303 or 309 ..... 3 or 1½
AE 315 ..... 1½
AE 316 or 317 ..... 1½
AE 401 3
Approved courses chosen from:
AE 205, 208, 305, 306, 307, 308, 310, 316, 317, 319, any 402 ..... 3 or 4½ 18

AE 103 with a grade of B or higher is required for acceptance in this area. Students should attempt to obtain this course in Year 1.

Courses chosen to complete this area must be approved by the Secondary Art Adviser.

Up to 3 units of additional work may be required if a student's background is considered to be inadequate for teaching art in the public school system.

Not all art education courses can be offered each year. Students may complete courses in a sequence of their own choice since there are no prerequisites. Students should consult with the Adviser.

Upper level visual arts courses may be substituted in the program with the approval of the Adviser.

ART (EXPANDED)

Acceptance into the area is subject to approval of the Secondary Art Adviser.

Corequisite:
ENGL 200, 201, 202, 203, 250, or HA 120 ..... 3 3

Area:
AE 103 3
AE 200 ..... 1½
AE 201 ..... 1½
AE 303 or 309 ..... 3 or 1½
AE 315 ..... 1½
AE 316 or 317 ..... 1½
AE 401 3
Approved Art Education ..... 10½ or 12
Approved upper level art or History in Art ..... 9 ..... 34½

AE 103 with a grade of B or higher is required. Students should attempt to obtain this course in Year 1.

Courses chosen to complete this area must be approved by the Secondary Art Adviser.

Not all art education courses can be offered each year. Students may complete courses in a sequence of their own choice since there are no prerequisites. Students should consult with the Adviser.

Upper level visual arts courses may be substituted in the program with the approval of the Adviser.

BIOLOGICAL SCIENCES

Corequisites:
CHEM 100 or 101 or 140* 1½
CHEM 102 ..... 1½
CHEM 231 ..... 1½
CHEM 232 ..... 1½ 6

Area:
BIOL 150A/B** 3
BIOC 200 ..... 1½
BIOL 200 ..... 1½
two of BIOL 203, 204, 206, 207 3
BIOL 300 or 320 ..... 1½
Approved courses from biology, microbiology, biochemistry, ED-E 373 ..... 4½ 15

* CHEM 140 has MATH 100 as a co- or prerequisite. Students who complete 140 with at least a B grade may replace CHEM 102 with an

approved CHEM. Consult the Secondary Science Adviser.

** Students excused BIOL 150 by the Biology Department (see page 40) will substitute 3 units of biology or microbiology.

One botany course must be included in the area.

Except where prior permission is obtained from the Education Advising Centre, additional area courses will be chosen by the student from those numbered 300 or higher.

CHEMISTRY

Corequisites:
- MATH 100 ..... 1½
- MATH 101 ..... 1½ 3

Area:
- CHEM 100, 101 or 140 ..... 1½
- CHEM 102 or 245 ..... 1½
- CHEM 213 ..... 1½
- CHEM 222 ..... 1½
- CHEM 231 ..... 1½
- CHEM 235 ..... 1½
- CHEM 245 (if not completed above) ..... 1½ or 0
- Approved chemistry courses* ..... 4½ or 6 15

* MATH 200 is prerequisite to some upper level courses.

Additional area courses must be approved by the Secondary Science Adviser.

DRAMATIC ARTS

Corequisites:
- ENGL 402 or 403 and ED-B 360; or ED-B 371 ..... 3 3

Area:
- THEA 110 3
- THEA 105 3
- THEA 181 3
- THEA 330 3
- THEA 382 ..... 3 15

Additional area courses will be chosen by the student from any Theatre offerings.

NOTE: An elective will be subsituted for the core requirement of THEA 150.

ENGLISH

Corequisites:
- ED-B 350 3
- LING 388 ..... 1½ 4½

Area:
- ED-B 371 3
- ENGL 200 3
- ENGL 215 ..... 1½
- ENGL 400 ..... 1½
- ENGL 366 3
- ENGL 457, 450, 451, 452, 453 3
- ENGL 429, 431, 432, 436, 437 ..... 3 18

Additional area courses will be chosen by the student from those numbered 300 or higher with the exception of additional courses in children's literature. In selecting additional courses students are advised to develop a balanced program of modern poetry, fiction and drama in preparation for teaching current secondary school curricula.

FRENCH

Area:
- FREN 180 (or 181/182) 3
- FREN 286/287 3
- FREN 290 (or 291/292) 3
- FREN 302 3
- FREN 320 ..... 1½
- FREN 350 ..... 3 ..... 16½

Additional area courses will be chosen by the student from those numbered 390 or higher. FREN 402 is recommended.

Students should note that an oral examination in French is required before admission to the professional year. This exam must be completed to the satisfaction of the Faculty of Education, or admission to professional year will be denied.

GENERAL SCIENCE (EXPANDED)

Corequisites:
- MATH 100 and 101 3
- MATH 200 ..... 1½ 4½

Area:
- ASTR 120 or 200A/B 3
- BIOL 150A/B* 3
- BIOL 203, 204, 206 or 207 ..... 1½
- CHEM 100, 101 or 140 ..... 1½
- CHEM 102 ..... 1½
- CHEM 222 ..... 1½
- CHEM 245 ..... 1½
- Two of EOS 100, 101, GEOG 203A, 203B 3
- PHYS 110 and 120** 3
- PHYS 216 ..... 1½
- Approved courses from biology and microbiology, or chemistry, or physics so that there are at least 9 units in one of these disciplines 12 33

* Students excused BIOL 150 by the Biology Department (see page 40) will substitute 3 units of approved courses.

** Students required to take Physics 100 may include the credit as an area course.

Courses chosen to complete this area must be approved by the Secondary Science Adviser.

GEOGRAPHY

Corequisites:
- HIST 130 3
- HIST 105, 240, 250, 253, 255, 376, 390 ..... 3 6

Area:
- GEOG 101A and 101B 3
- GEOG 361A and 361B 3
- GEOG 201A, 201B, 205B 1½
- GEOG 321, 322, 323, 340B, 341 3
- GEOG 343, 347B, 463A, 463B, 464B, 465 ..... 4½ 15

Except where prior permission is obtained from the Education Advising Centre, additional area courses will be chosen by the student from those numbered 300 or higher.

Students in this area may not choose Social Studies as their other area.

GEOGRAPHY/SOCIAL STUDIES (EXPANDED)

Corequisite:
- HIST 105, 130, 240 ..... 3 3

Area:
- GEOG 101A and 101B 3
- GEOG 203A and 203B 3
- GEOG 361A and 361B 3
- GEOG 340B and 350A 3
- Upper level geography 9
- Approved courses (minimum 3 units upper level) in ONE of the following areas: anthropology, classics, economics, history, pacific studies, political science, sociology 9

Approved courses in anthropology, classics, economics, history, law, pacific studies, political science, sociology ..... 4½ 34½

Courses chosen to complete this area must be approved by the Secondary Geography Adviser.

GERMAN

Corequisite:
Literature course at the 200 level or higher in any language other than German 3 3

Area:
GER 100 and 200, or 149 6
GER 204 3
GER 300 3
GER 400 or higher 3 15

Additional area courses will be chosen by the student from those numbered 400 or higher.

Students should note that an oral examination in German is required before admission to the professional year. This exam must be completed to the satisfaction of the Faculty of Education, or admission to professional year will be denied.

HISTORY

Corequisites:
ENGL 200, 201 or 202 3
GEOG 101A and 101B 3 6

Area:
Canadian History 3
Modern European or contemporary world history 3
POLI 100, 360 and 361 or 362, or 470 3
Approved history electives 6 15

Courses chosen to complete this area must include at least 6 units lower level and at least 9 units upper level.

Students in this area may not choose History/History in Art or Social Studies as their other area.

Except where prior permission is obtained from the Education Advising Centre, additional area courses will be chosen by the student from those numbered 300 or higher. Three units from CLAS 330 or 340 are also acceptable.

HISTORY/HISTORY IN ART

Corequisites:
GEOG 101A and 101B 3 3

Area:
Canadian History 3
Modern European or contemporary world history 3
Approved history electives 3-6
HA 120 3
History in Art electives 6-9 21

At least 3 units of courses chosen in history must be upper level.

This is a 21 unit area for students wishing to take History and History in Art as one area.

Students in this area may not choose History as their other area.

HISTORY/SOCIAL STUDIES (EXPANDED)

Corequisites:
ENGL 200, 201, or 202 3
GEOG 101A and 101B 3 6

Area:
Canadian History 3
Modern European or contemporary world history 3
POLI 100, 360 and 361 or 362, or 470 3
Approved history electives 9
Approved courses (minimum 3 units upper level) in ONE of the following areas: anthropology, classics, economics, geography, pacific studies, political science, sociology 9
Approved courses in anthropology, classics, economics, geography, law, pacific studies, political science, sociology ..... 4½ 31½

Courses chosen to complete this area must include at least 6 units upper level in the History and Political Science requirement, at least 12 units upper level overall, and must be approved by the Secondary History Adviser.

MATHEMATICS

Area:
MATH 100 and 101 3
MATH 233A and 233C 3
MATH 362 ..... 1½
MATH 368A 1½
STAT 250 and 251 3
Two of CSC 110, 112, 115 ..... 3 15

Students who consider Mathematics their first teaching area are advised to take a minimum of 18 units of mathematics and computer science courses. In addition to the 15 units listed above, MATH 333A and 333C are recommended. Additional area courses will be chosen by the student from courses in mathematics, statistics and computer science.

MUSIC (CHORAL)

Area:
ME 101 ..... 1½
Mus 101A, 101B, 170 3
ME 201 ..... 1½
ME 301 ..... 1½
ME 401 ..... 1½
Mus 110 3
Mus 356 3
ME 216 2
ME 402 ..... 1½
ME 308 or 303A 1½
Two of Mus 180, 280, 380, 480
ME 118, 218, 318, 418
ME 120, 220, 320, 420
ME 121, 221, 321, 421 ..... 2 22

Any student who wishes to substitute an elective for ED-P 498 should consult the Education Advising Centre. Students wishing to enter this area must pass a music education admissions interview normally held in March.

MUSIC (INSTRUMENTAL)

Area:
ME 101 ..... 1½
Mus 101A, 101B, 170 3
ME 201 ..... 1½
ME 301 ..... 1½
ME 401 ..... 1½
ME 216 2
ME 316 1
Two of Mus 331, 332, 333 3
Mus 356 3
ME 402 ..... 1½
Two of Mus 180, 280, 380, 480
ME 118, 218, 318, 418
ME 120, 220, 320, 420
ME 121, 221, 321, 421 ..... 2 ..... 21½

Any student who wishes to substitute an elective for ED-P 498 should consult the Education Advising Centre. Students wishing to enter this area must pass a music education admissions interview normally held in March.

MUSIC (EXPANDED)

Area:
- ME 101 ..... 1½
- Mus 101A, 101B, 170 3
- ME 201 ..... 1½
- ME 301 ..... 1½
- ME 401 ..... 1½
- Mus 110 3
- Mus 331 ..... 1½
- Mus 332 ..... 1½
- Mus 333 ..... 1½
- Mus 356 3
- ME 216 2
- ME 316 1
- ME 120 or 121 1
- ME 219 1
- ME 402 ..... 1½
- Approved Music or Music Education 3
- Two of Mus 180, 280, 380, 480
  ME 118, 218, 318, 418
  ME 220, 320, 420
  ME 221, 321, 421 ..... 2 31

Any student who wishes to substitute an elective for ED-P 498 should consult the Education Advising Centre. Students wishing to enter this area must pass a music education admissions interview normally held in March.

Students choosing the expanded teaching area in music education will be required to take, in addition, at least 7½ units not including corequisites, chosen from one other teaching area with a grade point average of 4.00 (UVic B-).

PHYSICAL EDUCATION

Refer to page 154 for information regarding acceptance into this area.

Area: Physical Education
- PE 106, 107, 120 and 122 2
- One of PE 109 or 114 or 119 ..... ½
- One of PE 116 or 117 ..... ½
- One of PE 121 or 123 or 124 or 125 ..... ½
- [1]Two activities from PE 105-125 1
- PE 141 ..... 1½
- PE 143 ..... 1½
- PE 144 ..... 1½
- PE 241B 1½
- PE 245 ..... 1½
- PE 341 ..... 1½
- PE 344 ..... 1½
- PE 346 ..... 1½
- PE 352 ..... 1½
- PE 360 ..... 1½
- PE 361 ..... 1½
- PE 443 ..... 1½
- PE 452 ..... 1½
- Three of PE 461 A-M 1½
- One of PE 342, 347, 348, 441 or 445 ..... 1½ 27

[1] Students must pass a fitness test *or* take PE 115. Students must possess their Bronze Medallion Certificate *or* pass a swimming competency exam *or* take PE 105.

PHYSICS

Corequisites:
- MATH 100 and 101 3
- MATH 200 and 201 ..... 3 6

Area:
- PHYS 100, 110, 120, 220, 215, 216, 317, 325; or 110, 120, 214, 215, 216, 220, 317, 325 12
- Approved Physics 3 15

Students are urged to seek advice from the Secondary Science Adviser. Additional area courses must be approved by the Adviser.

SOCIAL STUDIES

Area:
- GEOG 101A and 101B 3
- GEOG 203A and 203B 3
- GEOG 361A and 361B 3
- Canadian History 3
- Modern European or contemporary world history 3
- POLI 100, 360 and 361 or 362, or 470 3
- Three units chosen from GEOG 340B, 350A, upper level history 3 21

Courses chosen in history and political science must include at least 3 units upper level.

This is a 21 unit area for students wishing to take Geography and History as one teaching area. In the professional year students will choose either ED-E 755 or 758. Students in this area may not choose Geography, History or History/History in Art as their other area.

SOCIAL STUDIES (EXPANDED)

Corequisite:
- ENGL 200, 201 or 202 ..... 3 3

Area:
- GEOG 101A and 101B 3
- GEOG 203A and 203B 3
- GEOG 361A and 361B 3
- GEOG 340B and 350A 3
- Upper level geography 3
- Canadian history 3
- Modern European or contemporary world history 3
- POLI 100, 360 and 361 or 362, or 470 3
- Approved history electives 6
- Approved courses in anthropology, classics, economics, upper level geography, upper level history, law, pacific studies, political science, sociology ..... 4½ 34½

Courses chosen in history and political science must include at least 6 units upper level.

Students who elect this area will take both ED-E 755 and 758 in the professional year.

BACHELOR OF EDUCATION
POST DEGREE PROFESSIONAL PROGRAM — SECONDARY

This is a two year program for applicants with an approved degree. The first year, normally ten months, prepares students for a teaching certificate. Completion of the second year results in the granting of the degree Bachelor of Education from the University of Victoria.

ADMISSION

The deadline for receipt of application forms is February 28. There is a quota on each of the teaching subject areas of this program. Priority is given to candidates presenting two teaching subjects. Applications will be considered from those who meet the following requirements:

(a) successful Faculty interview; and
(b) a degree from a recognized university acceptable in content to the Faculty of Education Admissions and Adjudication Committee; and
(c) a grade point average of at least 3.00 (UVic C+) on the most recent session and on the most recent two years (30 units); and
(d) credit for 3 units of approved English (The Faculty requires students to demonstrate competency in written English. This may be satisfied by ENGL 115 with a grade of at least C+ or 215 as part of the required 3 units, or by successful completion of the ENGL 115 equivalency examination in addition to the 3 units of approved English.); and
(e) academic preparation in two of the following areas (NOTE: limited admission with one area only for those majors marked with an asterisk*):
[CONCENTRATION: minimum 9 units (18 semester hours) of upper level credit; minimum B- average (UVic 4.00); must be accompanied by a second concentration. MAJOR:* minimum 15 units (30 semester hours) of upper level credit; minimum B- average (UVic 4.00).]
(i) **Art***: degrees with a concentration or major in visual arts must have their content approved in advance by the Faculty Adviser.
(ii) **Biology*, Chemistry***, or **Physics***: degrees with a concentration or major in any of these sciences, must have their content approved in advance by the Faculty Adviser.
(iii) **English***: whether presenting a concentration or major, the following courses or their equivalents **must** be included: ENGL 366; 3 units from ENGL 457, 450, 451, 452, 453; 3 units from ENGL 429, 431, 432, 434, 436, 437; ED-B 350; ED-B 371.
(iv) **French*, German, Russian or Spanish**: degrees with a concentration or major. Applicant must pass an oral competency exam.
(v) **Geography***: whether presenting a concentration or major, the following courses or their equivalents **must** be included: HIST 130; 3 units from HIST 105, 240, 250, 253, 255, 376, 390; GEOG 101A**, 101B**, 361A, 361B; 1½ units from GEOG 201A, 201B, 205B; 3 units from GEOG 321, 322, 323, 340B, 341; 4½ units from GEOG 343, 347B, 463A, 463B, 464B, 465.
**or proof of physical and cultural elements courses from high school, college, or university.
(vi) **History***: whether a concentration or major, 3 units of Canadian History and 3 units of approved introductory Geography must be included.
(vii) **Mathematics***: a concentration or major. In lieu of the concentration, the 15 unit mathematics teaching area as outlined on page of this Calendar is acceptable.
(viii) **Music***: requires a University of Victoria Bachelor of Music with Major in Music Education (Secondary) or its equivalent.
(ix) **Physical Education***: whether presenting a concentration or major, all the specific physical education courses or their equivalents as outlined under *Physical Education* on page of this Calendar must be presented.
(x) **Theatre**: degrees with a concentration in Theatre must have THEA 382 and 330 or their equivalents and have their content approved in advance by the Faculty Adviser.
(xi) **Other subject areas** normally taught in B.C. Secondary Schools may be acceptable subject to the approval of the Admissions and Adjudication Committee.

Students of exceptional ability who do not meet the stated admission requirements may appeal to the Faculty Admissions and Adjudication Committee for consideration. "Exceptional" may be considered in terms of high grade point average, relevant work experience or unique academic qualifications.

Transcripts showing completion of all of the above requirements must be received in the Education Advising Centre by May 31 of the year of application.

PROGRAMS

Maximum enrollments have been established; therefore the Faculty cannot guarantee that all qualified candidates will be accepted. Accepted candidates will be notified as early as possible, but final acceptance may not be until late July.

Registration must be completed by Tuesday, September 3, 1991. No registration will be accepted after that date as school opening orientation begins on Wednesday, September 4.

Students interested in an Internship Program should make inquiries in the Education Advising Centre early in January, prior to submission of their application for admission.

Students will spend an extended time in the schools and take courses at the University directly related to their professional training. Normally, the courses are taken as a coordinated unit during a ten month period beginning in September. Because of the professional involvement off campus during this year, students are not normally permitted to take courses in addition to those specified. Any exceptions must have approval from the Education Advising Centre.

A grade point average of at least 3.00 must be obtained on this program in order to qualify for certification.

COURSE REQUIREMENTS

1. Regular Program - Year 1

September-May	*1 Area*	*2 Areas**
ED-D 401	1½	1½
ED-D 337	1½	1½
ED-B 343C	1½	1½
ED-B 359	1	1
ED-D 406	3	3
ED-A 750 - ED-E 769	4½	6
ED-P 790	1½	1½
ED-P 792	½	½
	15	16½

*except sciences and second languages

May-June		
ED-B 420, 423, 425 or 427	3	3
ED-B 430	1½	1½
	4½	4½
	19½	21

Eligible for CERTIFICATION

2. Alternative Programs - Year 1

NOTE: ALTERNATIVE PROGRAMS MAY NOT BE OFFERED EVERY YEAR

(a) Secondary Internship Program

May-June	
ED-B 420, 423, 425 or 427	3
ED-D 406	3
July-August	
ED-B 343C	1½
ED-B 430	1½
ED-D 337	1½
ED-P 777	1½
September-December	
ED-D 401	1½
September-June	
Approved Curriculum, Instruction and Practicum in Secondary School Subjects	4½-6
ED-P 793	1½
	19½-21

(b) Special Music Program*

September-May	
ED-P 799A	9
ED-A 762	3 or 4½
Approved Curriculum, Instruction and Practicum in a Secondary School subject, if required	3 or 0

Approved Education elective,
if required ..... 0 or 1½ 15

* Restricted to applicants who have completed the Bachelor of Music with Major in Music Education (Secondary) from the University of Victoria, or equivalent. Please note that the program may differ from the format described above.

Eligible for CERTIFICATION

3. Degree Completion

Students may proceed to a B.Ed. degree by taking an additional 12 to 15 units. The courses must be selected in consultation with the Education Advising Centre to ensure that they support the teaching areas or are used to complete a second teaching area if appropriate.

BACHELOR OF ARTS

1. B.A. HONOURS AND MAJOR IN HUMAN PERFORMANCE

The School of Physical Education offers Major and Honours programs in the areas of Human Performance. The Major program requires a degree of specialization in the last two years and may permit the student to proceed to graduate study or to a professional position in the Sport and Leisure fields. The Honours program is recommended for students planning graduate work in the areas of physiological and psychological adaptation to sport and exercise. Students who select their electives wisely may also qualify to enter an education post degree professional program for a teaching career.

Major

The School of Physical Education each year will accept students in the Human Performance Major program by the selection process described under Admission to Physical Education on page 154. Approximately fifteen students are selected for the B.A. program. Students must also meet general Faculty admission requirements specified on page 154. In order to continue in this program a grade point average of at least 3.00 is required in every session attended.

Honours

Students seeking an honours degree in Human Performance must apply to the Honours Adviser of the Department before the start of the fourth year. Applicants require a minimum of 6.00 grade point average in all physical education courses (excluding PE 100 level courses) and a grade point average of 3.50 in non-physical education courses. If accepted, honours students are responsible for finding a supervisor for their honours thesis. All requirements should be completed within five academic years. However, students must complete a minimum of 12 units in the winter session in which they complete the honours thesis. The completed thesis will be examined by a three person committee including the supervisor. To graduate with an honours degree, a student must have a minimum 3.50 grade point average for all work outside the School. First class honours will be awarded to students who obtain:

(1) graduating average of at least 6.50
(2) a grade point average of at least 6.50 for 300 and 400 level School of Physical Education courses
(3) a grade of at least an A- in PE 499.

Second class honours will be awarded to students who obtain:

(1) a graduating average of at least 3.50
(2) a grade point average of at least 5.50 for 300 and 400 level School of Physical Education courses
(3) a grade of at least B- in PE 499.

A student who obtains a first class average in all 300 and 400 level courses but a second class grade in PE 499 will have the option of receiving a BA with a First class Major in Human Performance or Second Class Honours. A student who achieves a grade lower than B- in PE 499 will graduate under the Major program providing all other requirements for the degree are fulfilled. The submission date for the thesis in PE 499 is the last day of classes.

HUMAN PERFORMANCE PROGRAMS

B.A. Honours		B.A. Major	
Year One: (Arts and Science)		**Year One:** (Arts and Science)	
ENGL 115/116 or 121/122	3	ENGL 115/116 or 121/122	3
PE 115 plus two activities	1½	PE 115 plus two activities	1½
PE 141	1½	PE 141	1½
PE 143	1½	PE 143	1½
PSYC 100	3	PSYC 100	3
SOCI 100	1½	SOCI 100	1½
Electives	4½	Electives	4½
Year Two:		**Year Two:**	
PE activities	2½	PE activities	2½
PE 241A	1½	PE 241A	1½
PE 241B	1½	PE 241B	1½
PE 243	1½	PE 243	1½
PE 253	1½	PE 253	1½
PSYC 331	3	PSYC 331	3
Electives	4½	Electives	4½
Years Three and Four:		**Years Three and Four:**	
PE activities	2	PE activities	2
PE 342	1½	PE 342	1½
PE 346	1½	PE 346	1½
PE 347	1½	PE 347	1½
PE 348	1½	PE 348	1½
PE 442	1½	PE 442	1½
PE 443 or 354A	1½	PE 443 or 354A	1½
PE 444	1½	PE 444	1½
PE 445	1½	PE 445	1½
PE 447	1½	PE 447	1½
Approved statistics course	1½	Upper level psychology	3
Upper level psychology	3	Upper level sociology	3
Upper level sociology	3	Electives	12
PE 460	1		
PE 499	3		
Electives	7½		
Total Units	67		66

NOTES (Honours and Major):

(a) Students must complete 6 units of activity courses which must include PE 105, PE 115, and at least two from the PE 461 series. PE 470 may be substituted for the two PE 461's at a loss of ½ unit.
(b) Nine units of electives must be from the Faculty of Arts and Science and at least 6 of these must be at the 300 or 400 level. No more than 6 may be additional physical education units.
(c) A second area of concentration should be included. Consult the Human Performance Faculty Adviser.

2. B.A. MAJOR IN LEISURE STUDIES COOPERATIVE EDUCATION PROGRAM

The Leisure Studies program prepares students to enter the field of Recreational Administration and provides preparation in the planning, implementation and supervision of programs in a wide range of recreation settings.

The Leisure Studies program is available only on a cooperative model basis. Please refer to page 32 for a general description of the Cooperative Education concept and general regulations governing all cooperative education students.

The School of Physical Education each year will accept students in the Leisure Studies major by the selection process described under Admission to Physical Education on page 154. Students must also meet general Faculty admission requirements specified on page 154 except that the grade point average must be at least 4.00 (instead of 3.00).

A maximum of 15 students will be admitted per year. Students must obtain at least a 3.50 grade point average on every session attended and must complete four Work Terms (each a minimum duration of 13 weeks).

Each Work Term is noted on the student's academic record (grading: COM, N or F). A student who does not complete a Work Term satisfactorily will normally be required to withdraw from the program but the Leisure Studies Committee may, upon review, authorize a further Work Term. The performance of students in the Leisure Studies Cooperative Program will be reviewed after each campus term and each Work Term. Students whose performance is deemed unsatisfactory by the Leisure Studies Committee will be so informed and will be advised by the Committee of the conditions they are to satisfy in order to remain in the program.

Year One: (Arts and Science)

C SC 100, 110, or 112	1½	
ENGL 115/116 or 121/122	3	
PE 115 plus two activities	1½	
PE 141	1½	
PE 143	1½	
PSYC 100	3	
SOCI 100	1½	
Electives	3	16½

Year Two:

COMM 253	1½	
ENGL 225	1½	
PE 241B	1½	
PE 243	1½	
PE 244	1½	
PE 252	1½	
PE 253	1½	
PE 270	1½	
PE 351	1½	
PE activities	1½	
Electives	1½	16½

Years Three and Four:

Three of ADMN (approved by Adviser)	4½	
ED-D 417	3	
PE 354A	1½	
PE 354B	1½	
PE 356	1½	
PE 454A	½	
PE 454B	1	
PE 445	1½	
SOCI 365 (or approved upper level sociology)	1½	
SOCI 371	1½	
Electives	12	30
Total Units for Degree		63

NOTES:

(a) Students must complete six activities from PE 104-132 and PE 461A-M.

(b) Of the 16½ units of electives 6 units must be approved upper level courses from faculties other than the Faculty of Education.

(c) When neither of the upper level sociology courses is offered, a substitute will be approved by the Leisure Studies Faculty Adviser.

BACHELOR OF SCIENCE

1. B.Sc. HONOURS AND MAJOR IN HUMAN PERFORMANCE

The School of Physical Education offers Major and Honours programs in the areas of Human Performance. The Major program requires a degree of specialization in the last two years and may permit the student to proceed to graduate study or to a professional position in the Sport and Leisure fields. The Honours program is recommended for students planning graduate work in the areas of physiological and psychological adaptation to sport and exercise. Students who select their electives wisely may also qualify to enter an education post degree professional program for a teaching career.

Major

The School of Physical Education each year will accept students in the Human Performance Major program by the selection process described under Admission to Physical Education on page 154. Approximately ten students are selected for the regular B.Sc. program. Students must also meet general Faculty admission requirements specified on page 154. In order to continue in this program a grade point average of at least 3.00 is required in every session attended.

Honours

Students seeking an Honours degree in Human Performance must apply to the Honours Adviser of the Department before the start of the fourth year. Applicants require a minimum of 6.00 grade point average in all physical education courses (excluding PE 100 level courses) and a grade point average of 3.50 in non-physical education courses. If accepted, honours students are responsible for finding a supervisor for their honours thesis. All requirements should be completed within five academic years. However, students must complete a minimum of 12 units in the winter session in which they complete the honours thesis. The completed thesis will be examined by a three person committee including the supervisor. To graduate with an honours degree, a student must have a minimum 3.50 grade point average for all work outside the School. First class honours will be awarded to students who obtain:

(1) a graduating average of at least 6.50
(2) a grade point average of at least 6.50 for 300 and 400 level School of Physical Education courses
(3) a grade of at least A- in PE 499.

Second class honours will be awarded to students who obtain:

(1) a graduating average of at least 3.50
(2) a grade point average of at least 5.50 for 300 and 400 level School of Physical Education courses
(3) a grade of at least B- in PE 499.

A student who obtains a first class average in all 300 and 400 level courses but a second class grade in PE 499 will have the option of receiving a B.Sc. with a First class Major in Human Performance or Second Class Honours. A student who achieves a grade lower than B- in PE 499 will graduate under the Major program providing all other requirements for the degree are fulfilled. The submission date for the thesis in PE 499 is the last day of classes.

HUMAN PERFORMANCE PROGRAMS

B.Sc. Honours

Year One: (Arts and Science)

*BIOL 101 or 150A/B	3
*CHEM 100 or 101 or 140	1½
*CHEM 102 or 245	1½
ENGL 115/116 or 121/122	3
PE 115 plus two activities	1½
*PE 141	1½
PE 143	1½
Electives	3

B.Sc. Major

Year One: (Arts and Science)

*BIOL 101 or 150A/B	3
*CHEM 100 or 101 or 141	1½
*CHEM 102 or 245	1½
ENGL 115/116 or 121/122	3
PE 115 plus two activities	1½
*PE 141	1½
PE 143	1½
Electives	3

Year Two:

* MATH 100/101 or 102/151	3
PE activities	3
*PE 241A	1½
*PE 241B	1½
*PHYS 102, 103 or two of 100, 110, 120	3
Electives	4½

Years Three and Four:

PE activities	1½
PE 253	1½
*PE 341	1½
*PE 344	1½
PE 351	1½
PE 441	1½
*PE 442	1½
*PE 444	1½
PE 447	1½
*PE 451	1½
*STAT 250	1½
PE 460	1
PE 499	3
Electives	13½
Total Units	67

* science designated units

NOTES (Honours and Major):

(a) To qualify for the Bachelor of Science degree, 33 science designated units must be completed within the program.

(b) Students must complete 6 units of activity courses which must include PE 105, PE 115, and at least two from the PE 461 series. PE 470 may be substituted for the two PE 461's at a loss of one half unit.

(c) Students may substitute a second 3 units in any of the four areas for one of the basic sciences (chemistry, physics, mathematics, biology).

(d) At least 12 units of the additional electives must be selected from the science departments listed below and 9 of these must be at the 300 or 400 level.

Biochemistry and Microbiology	Computer Science
Biology	Mathematics and Statistics
Chemistry	Physics and Astronomy

The following specific courses are also approved:

ANTH 100A/B	PSYC 215A/B	PSYC 423/424
ANTH 250	PSYC 315/415	

No more than 9 additional units of physical education may be included.

2. B.Sc. MAJOR IN HUMAN PERFORMANCE COOPERATIVE EDUCATION PROGRAM

Please refer to page 32 for a general description of the Cooperative Education concept and general regulations governing all cooperative education students.

Year Two:

*MATH 100/101 or 102/151	3
PE activities	3
*PE 241A	1½
*PE 241B	1½
*PHYS 102, 103 or two of 100, 110, 120	3
Electives	4½

Years Three and Four:

PE activities	1½
PE 253	1½
*PE 341	1½
*PE 344	1½
PE 351	1½
*PE 441	1½
*PE 442	1½
*PE 444	1½
PE 447	1½
*PE 451	1½
Electives	18
	66

The School of Physical Education each year will accept a maximum of five students in this program by the selection process described under Admission to Physical Education on page 154. Students must also meet general Faculty admission requirements specified on page 154 except that the grade point average must be at least 4.50 (instead of 3.00).

Students must maintain a grade point average of at least 3.50 and must complete four Work Terms (each a minimum duration of 13 weeks).

Each Work Term is noted on the student's academic record (grading: COM, N or F). A student who does not complete a Work Term satisfactorily will normally be required to withdraw from the program. The performance of students in this program will be reviewed after each campus term and each Work Term. Students whose performance is deemed unsatisfactory will be so informed and will be advised of the conditions they are to satisfy in order to remain in the program.

Year One: (Arts and Science)

*BIOL 101 or 150A/B	3	
*CHEM 100 or 101 or 140	1½	
*CHEM 102 or 245	1½	
ENGL 115/116 or 121/122	3	
PE 115 plus two activities	1½	
*PE 141	1½	
PE 143	1½	
Electives	3	16½

Year Two:

*MATH 100/101 or 102/151	3	
PE activities	3	
*PE 241A	1½	
*PE 241B	1½	
PE 253	1½	
*PHYS 102, 103 or two of 100, 110, 120	3	
Electives	3	16½

Years Three and Four:

PE activities	1½	
*PE 341	1½	
*PE 344	1½	
PE 351	1½	
PE 354A	1½	
PE 354B	1½	
*PE 441	1½	
*PE 442	1½	
*PE 444	1½	
*PE 451	1½	
Electives	18	33
Total Units for Degree		66

* science designated units

See NOTES under 1. above.

DIPLOMA IN SCHOOL LIBRARIANSHIP

This is a fifteen unit program leading to a Diploma in School Librarianship, designed to prepare teachers to function as teacher librarians in either elementary or secondary schools.

Admission to the program requires certification and at least one year's successful teaching experience. For those teachers who have completed part or all of the former elementary program Library Education teaching area, it may be possible to replace those courses with other approved electives and complete requirements for the Diploma. It should be noted, however, that courses taken to apply toward the Diploma may not also apply toward a degree.

The Diploma program must be completed through the University of Victoria. The program is intended to be offered in summer sessions although some courses may be available during winter session. While it is hoped that all courses will be offered over a three summer cycle, it is not possible to ensure that all will be available.

DIPLOMA IN SCHOOL LIBRARIANSHIP (ELEMENTARY)

LE 432	1½	
LE 433	1½	
LE 434A	1½	
LE 435	1½	
LE 437A	1½	
LE 438	1½	
ED-B 494Q*	1½	
ED-B 360	1½	
ED-B 361 or approved elective	1½	
ED-B 430	1½	15

Pre- or corequisites:
ED-B 341** 3
ED-B 342 ..... 1½
ED-B 343A or B 1½

DIPLOMA IN SCHOOL LIBRARIANSHIP (SECONDARY)

LE 432 ..... 1½
LE 433 ..... 1½
LE 434B 1½
LE 435 ..... 1½
LE 437B 1½
LE 438 ..... 1½
ED-B 494Q* 1½
ED-B 360 ..... 1½
ED-B 361 or approved elective 1½
ED-B 430 ..... 1½ 15

Pre- or corequisites:
ED-B 342 ..... 1½
ED-B 343C 1½
ED-B 371 3

* Directed studies
** May substitute other approved children's literature course (1½-3)

CERTIFICATE IN KÓDALY METHODOLOGY

This is a nine unit program leading to a Certificate in Kódaly Methodology in Music Education, designed to provide teachers with a comprehensive background in both musicianship and pedagogy based upon the Kódaly system of music instruction.

Year One
ME 350 ..... 1½
ME 351 ..... 1½

Year Two
ME 450 ..... 1½
ME 451 ..... 1½

Year Three
ME 460 ..... 1½
ME 461 ..... 1½

This program is normally offered in summer session only. Courses applied toward this Certificate *may not* also apply toward a degree. Applicants who have previously received credit toward a degree for any of these courses (or their equivalents) may substitute up to three units of courses with the consent of the Department. To be admitted to the program students must normally have a 3 unit first year university level music theory course (e.g. University of Victoria MUS 101A, 101B and 170) or a second level conservatory theory course (e.g. Royal Conservatory of Music Grade II) or the equivalent.

UNDERGRADUATE COURSES IN THE FACULTY OF EDUCATION

Courses are designated as follows:

ED-A DE ME	Department of Arts in Education
ED-B LE	Department of Communication and Social Foundations Adult Education Curriculum Studies Early Childhood Education Educational Administration and Supervision Educational Foundations Educational Technology Language Arts Library Education
ED-C PE	School of Physical Education
ED-D	Department of Psychological Foundations in Education Communication and Counselling Learning and Development Measurement, Evaluation and Computer Applications in Education Special Education
ED-E	Department of Social and Natural Sciences Mathematics Education Science Education Social Studies Education
ED-P	Division of Professional Studies

Not all courses listed hereunder will be offered every session.

The University timetable lists the courses that will be offered in a specific session. Students should check with the appropriate Department or School regarding the upper level courses of their teaching areas.

Both core and elective courses included in the professional year and in specialized programs will be scheduled as part of a program and may vary from the normal timetable.

Elementary students registering in the professional year will be issued prepared timetables at the initial meeting on Tuesday, September 3, 1991. Secondary students will be given a preassigned course schedule from which they can make up their timetables at the initial meeting on Tuesday, September 3, 1991. Professional year students should not attempt to make up individual timetables before these meetings.

Courses numbered 700-799 are restricted to students accepted in a professional year. Students who wish to repeat any 700 level course must appeal to the Faculty Admissions and Adjudication Committee for permission.

Registration in all 300 level courses is restricted to students having second year standing or higher. Courses numbered 400 or above are reserved for students registered in third or following years. These regulations do not apply to the following performance oriented courses: ME 318, 418, 320, 321, 402, 420, 421. These courses may be taken by first or second year students with appropriate backgrounds.

It is the responsibility of all registrants to ensure that all calendar prerequisites for the courses in which they register have been met. Prerequisites may be waived (a) if the student has completed equivalent work, or (b) in other exceptional cases. Consult the Education Advising Centre.

Many Education courses are open to students in other faculties. Further information is printed in the University timetable.

DEPARTMENT OF ARTS IN EDUCATION

UNDERGRADUATE COURSES

ART EDUCATION

Dr. B. Zuk, Elementary Adviser
Professor G.S. Hodder, Secondary Adviser

LIMITATION OF ENROLLMENT

Studio based courses are normally subject to limited enrollment because of space and equipment needs. Departmental permission is required for non-Education students.

A E 101 (2) ART FOR GENERAL CLASSROOM TEACHERS (Elementary) 2.3 fee units
Content of the Art program in the elementary school; principles, practice and techniques of instruction. (Not available for credit on a degree program for students who have already completed 100, 103 or ED-A 701) (Students planning to emphasize art in their degree program should register in 103.) (*Prerequisite:* Authorization to register in the Faculty of Education or permission of the Education Advising Centre) (2-1)

A E 103 (formerly 100) (3) INTRODUCTION TO ART EDUCATION 3.4 fee units
The role of art in education; practical exploration in art, classroom management and teaching techniques (elementary and secondary). (Not available on a degree program for students who have already completed 101 or ED-A 701) (Students planning to emphasize art in their degree program should register in this course.) (3-1)

With the exception of 320 and 321 all of the following art education courses deal with classroom practice at both the elementary and secondary levels.

A E 200 (1½) DESIGN FOR THE CLASSROOM 1.7 fee units
Analysis of the elements and principles of design, through practical and theoretical experiences as applied to the classroom. (3-1)

A E 201 (1½) IMAGE DEVELOPMENT FOR THE CLASSROOM 1.7 fee units
An introduction to theories, methods and practices of image development for the classroom. (3-1)

A E 205 (1½) DIMENSIONAL ART FOR THE CLASSROOM 1.7 fee units
Teaching methods, techniques and studio investigation of media in drawing, painting, design, printmaking and other two dimensional art. (3-1)

A E 208 (1½) THREE DIMENSIONAL ART FOR THE CLASSROOM 1.7 fee units
Teaching methods, techniques and studio investigation of media in carving, modelling, construction and other three dimensional art. (3-1)

A E 303 (3) CERAMICS 3.4 fee units
An introductory course in ceramics. Discussion and practice will include all aspects of the methods and processes as they relate to classroom practice. (Consent of an art education adviser required if 309 already completed.) (3-1)

A E 305 (1½) DRAWING FOR THE CLASSROOM 1.7 fee units
Development of skills and teaching methods in drawing through studio exploration. (Normally not available for credit on a degree program for students who have already completed 302) (3-1)

A E 306 (1½) PAINTING FOR THE CLASSROOM 1.7 fee units
Development of skills and teaching methods in painting through studio exploration. (Normally not available for credit on a degree program for students who have already completed 302) (3-1)

A E 307 (1½) PRINTMAKING FOR THE CLASSROOM 1.7 fee units
Development of skills and teaching methods in printmaking through studio exploration. (Normally not available for credit on a degree program for students who have already completed 300) (3-1)

A E 308 (1½) SCULPTURE FOR THE CLASSROOM 1.7 fee units
Development of skills and teaching methods in sculpture through studio exploration. (Normally not available for credit on a degree program for students who have already completed 301) (3-1)

A E 309 (1½) CERAMICS FOR THE CLASSROOM 1.7 fee units
Development of basic skills and teaching methods in hand built ceramics, including operation of kilns. (Normally not available for credit on a degree program for students who have already completed 303) (3-1)

A E 310 (1½) INTRODUCTION TO APPLIED DESIGN 1.7 fee units
Introduction to skills and teaching methods in selected applied design areas through studio exploration. (Normally not available for credit on a degree program for students who have already completed 304) (3-1)

A E 315 (1½) CURRICULUM PLANNING IN ART EDUCATION
Study of art education curriculum guides and of methods of planning programs for the classroom. (3-1)

A E 316 (1½) ART CRITICISM SKILLS FOR THE CLASSROOM
Development of critical skills for the classroom through study of art criticism theories and field experiences. (3-1)

A E 317 (1½) ART APPRECIATION FOR THE CLASSROOM
Methods of teaching art appreciation in the classroom with emphasis on Canadian art. Students will prepare teaching materials. (3-1)

A E 319 (1½) PHOTOGRAPHY FOR THE CLASSROOM 1.7 fee units
Basic approaches to the use of photography as an art medium. (3-1)

A E 320 (1½) ART AND THE YOUNG CHILD 1.7 fee units
Study and development and characteristics of child art at preschool, kindergarten and primary levels with practical experience, teaching and evaluation methods. (3-1)

A E 321 (1½) ART IN THE INTERMEDIATE GRADES 1.7 fee units
A survey of studio methods and materials, texts, media resources, inter-disciplinary procedures and evaluation methods with an emphasis on teaching at the intermediate level. (3-1)

A E 322 (1½) VIDEO AND COMPUTER ART FOR THE CLASSROOM 1.7 fee units
Development of skills and teaching methods in computer and video art through studio exploration. (3-1)

A E 401 (1½ or 3) SPECIAL STUDIES
Studies of selected topics in the theory and practice of Art Education. (May be repeated up to 6 units with permission of an adviser in the Department of Arts in Education) (3-1)

A E 402 (1½) SPECIFIC METHODOLOGIES, MATERIALS AND TECHNIQUES IN ART EDUCATION
(A student may take up to a maximum of 6 units of the following areas; however, the maximum number of units accepted for credit on the student's degree program will be at the discretion of the Department.) (*Prerequisite:* Appropriate introductory course for the selected art area) (3-1)

402A	1.7 fee units	Drawing
402B	1.7 fee units	Painting
402C	1.7 fee units	Printmaking
402D	1.7 fee units	Sculpture
402E	1.7 fee units	Applied Design
402F	1.7 fee units	Photography
402G	1.7 fee units	Reasoned Criticism (*Prerequisite:* 316 or 317)
402H	1.7 fee units	Ceramics (*Prerequisite:* 303 or 309)
402J		Computer and Video (*Prerequisite:* 322)

DRAMA EDUCATION

DE 204 (2) DRAMA EDUCATION FOR GENERAL CLASSROOM TEACHERS (Elementary)
Content of the drama program in the elementary school; principles, practice, and techniques of instruction. (Students planning to enter a drama education teaching area or concentration should register in THEA 181.) (*Prerequisite:* Authorization to register in the Faculty of Education or permission of the Education Advising Centre) (2-1)

MUSIC EDUCATION

Dr. B. Hanley, Elementary Adviser
Prof. G. King, Secondary Adviser

LIMITATION OF ENROLLMENT

Instrumental courses are normally subject to limited enrollment because of space and equipment needs. Departmental permission is required for non-Education students.

M E 101 (1½) INTRODUCTION TO MUSIC EDUCATION
Orientation to the profession; introduction to the role of music in education and society. Secondary level. (1½;1½)

M E 104 (2) MUSIC FOR GENERAL CLASSROOM TEACHERS (Elementary)
Content of the music program in the elementary school; principles, practice, and techniques of instruction. (Students planning to enter a music teaching area should register in 106.) (Not available for credit on a degree program for students who have already completed 106, ED-A 705 or 706.) (*Prerequisite:* Authorization to register in the Faculty of Education or permission of the Education Advising Centre) (2-1)

M E 105 (1½) MUSIC FUNDAMENTALS FOR CLASSROOM TEACHERS
Introduction to the language of music including sight reading, ear training and analysis. Normally followed by 106. (Students with exceptionally strong music backgrounds may not be required to take this course.) (Not available for credit on a degree program for students who have already completed MUS 100 or 101) (3-0)

M E 106 (1½) MUSIC IN THE ELEMENTARY SCHOOL (Introductory)
An introduction to the foundations of music education, the elementary music curriculum, and methods currently used in B.C. elementary schools. (Not available for credit on a degree program for students who have already completed ME 104) (*Pre- or corequisite:* 105 or MUS 101A, B, and 170) (3-0)

M E 118 (1½) MUSIC THEATRE WORKSHOP
In depth study of techniques and procedures related to the production of musical plays in the school. Both artistic and technical (e.g., staging, lighting, costumes, makeup) aspects will be included. (May be repeated for credit.) (3-0)

M E 120 (1) INSTRUMENTAL JAZZ: I
A study of historical and theoretical elements of jazz. There will be considerable emphasis on listening. (1-0)

M E 121 (1) VOCAL JAZZ: I
A study of techniques for teaching vocal jazz through performance and experience. This is a survey course covering repertoire, history, conducting, style, sound systems, rhythm sections, national standards. Emphasis is on participation and listening. (1-1)

M E 201 (1½) MUSIC EDUCATION SEMINAR: I
A study of the foundations of music education for secondary schools. School experience will be required. (*Pre- or corequisite:* 101) (2-2) or (1-0; 1-2)

M E 207 (1½) EDUCATIONAL MATERIALS FOR LISTENING
Continuation and development of classroom music activities with special emphasis on listening experiences. (3-0)

M E 208 (1½) PIANO CLASS FOR CLASSROOM TEACHERS
Development of piano keyboard skills useful in classroom music (for those with little or no piano background). (2-2) or (1-1; 1-1) or (1½-1; 1½-0)

M E 216 (2.0) INSTRUMENTAL/CHORAL TECHNIQUES
Practical ensemble experience for introductory level band and secondary choral with emphasis on beginning band methods and choral literature for the junior/senior secondary school choir. (2/2)

M E 218 (1½) MUSIC THEATRE WORKSHOP (Laboratory)
Workshop productions of one or two musical plays. (Grading: COM, N or F) (0-6)

M E 219 (1.5) CHORAL TECHNIQUES
Practical choral techniques and literature for elementary schools — conducting and methodology. A piano component may be included. (1-2)

M E 220 (1) INSTRUMENTAL JAZZ: II
Topics will include theoretical concepts, composing and arranging, basic improvisation, repertoire and conducting. (*Prerequisite:* 120) (1-0)

M E 221 (1) VOCAL JAZZ: II
The course focuses on practical experience through participation. Emphasis is on repertoire, conducting, improvisation in the large and small vocal jazz ensemble. (*Prerequisite:* 121) (1-1)

M E 300 (1½) THE TEACHING OF CHORAL AND CLASSROOM SINGING
Materials and rehearsal techniques for use with elementary school choral activities. (*Prerequisite:* 105, or MUS 101A and 101B, or consent of instructor) (3-0)

M E 301 (1½) MUSIC EDUCATION SEMINAR: II
A study of programs and materials for secondary schools with an emphasis on general music programs. Some school experience will be required. (Grading: INC; letter grade) (*Prerequisite:* 201 and admission to the Music Teaching Area or Bachelor of Music in Secondary Education) (2-2) or (1-0; 1-2)

M E 302 (1½) MUSIC IN EARLY CHILDHOOD
A survey of developmental implications as they pertain to the musical growth of the young child (3-8 years). Current music education methods and materials will be studied, and laboratory experiences will be included. (Not normally available to students in a music teaching area or concentration, except with permission of the instructor.) (3-0)

M E 303 (1½) CLASSROOM INSTRUMENTS
Students will acquire a satisfactory level of proficiency for classroom purposes. (A student may take all of the following areas; however, the maximum number of units accepted for credit on the student's degree program will be at the discretion of the Department.) (2-2)

303A Beginning guitar for classroom teachers

303B Ensembles (classroom percussion, recorder, bells, autoharp and bar instruments)

303C Ukulele

303D Recorder

M E 306 (3) MUSIC IN THE ELEMENTARY SCHOOL (Advanced)
A survey of texts and materials and methods of instruction for use in the elementary classroom. Sequential planning involving listening, singing, instrumental playing and movement activities. A school experience component is normally included. (*Prerequisite:* 106) (3-0)

M E 308 (1½) PIANO CLASS FOR CLASSROOM TEACHERS (Advanced)
Continuation of development of piano keyboard skills useful in classroom music (for those with some piano background, e.g. 208 or equivalent). (2-2) or (1-1; 1-1) or (1½-1; 1½-0)

M E 309 (1½) CANADIAN MUSIC FOR SCHOOLS
A survey of current educational resources in Canadian music; literature, activities and teaching techniques; correlation with other classroom studies. (3-0)

M E 316 (1) INSTRUMENTAL CLINIC: I
Practical ensemble experience on secondary instruments; teaching techniques; conducting, score study, ensemble evaluation procedures, and instrument repair. Emphasis on literature and techniques for junior and senior secondary school. (1-1)

M E 318 (1½) MUSIC THEATRE WORKSHOP (Laboratory)
(Description as for 218)

M E 319 (1.5) CHORAL SEMINAR
Understanding vocal production, the development of good vocal technique and methodology for teaching voice development. (3-0)

M E 320 (1) INSTRUMENTAL JAZZ: III
Advanced jazz concepts — theoretical, improvisational and practical. The class is organized in a laboratory band context. (*Prerequisite:* 220)

(0-2)

M E 321 (1) VOCAL JAZZ: III
A study of more advanced theoretical, improvisational, and practical vocal jazz concepts. Emphasis is on performance. (Registration confirmed after audition.) (0-4)

M E 400 (1½) STUDY OF SPECIFIC METHODOLOGY
Advanced courses for those in teaching areas or concentrations. (*Prerequisite:* 306) (3-0 or 1-3)

400B Orff

400C Experimental Music in Schools

400E Dalcroze

M E 401 (1½) MUSIC EDUCATION SEMINAR: III
Initiating and maintaining instrumental programs in the schools. School experiences will be required. Secondary level. (Grading: INC; letter grade) (*Prerequisite:* 301) (2-2) or (1-0; 1-2)

M E 402 (1½) COMPUTERS IN MUSIC EDUCATION
The use of computers and synthesizers in the school music program. Includes the MIDI protocol. (*Prerequisite:* Admission to the B.Mus. in Music Education or B.Ed. in Music Education, or permission of the Department.) (Not available for credit on a degree program for those who have completed 400D.) (1-3)

M E 418 (1½) MUSIC THEATRE WORKSHOP (Laboratory)
(Description as for 218)

M E 420 (1) INSTRUMENTAL JAZZ: IV
(Description as for 320)

M E 421 (1) VOCAL JAZZ: IV
A study of more advanced theoretical, improvisational, and practical vocal jazz concepts. Emphasis is on performance. (Registration confirmed after audition.) (0-4)

KODÁLY PROGRAM

These courses are intended to be offered during Summer only.

ME 350 (1½) KODÁLY — PEDAGOGY: I
An overview of the Kodály concept, strategies and techniques for developing rhythmic and tonal skills, concepts and musical attitudes; includes study of early childhood repertoire; songs, games and dances related to the primary curriculum (years K-3). (Not available for credit on a degree program for students who have already completed 400A)

ME 351 (1½) KODÁLY — MUSICIANSHIP: I
Tonal and rhythmic dictation, sight reading, improvisation, conducting and part reading; beginning level.

ME 450 (1½) KODÁLY — PEDAGOGY: II
Continuing study of techniques for developing rhythmic and tonal skills, curriculum development and lesson planning; includes study of early intermediate repertoire (years 4-5). (*Prerequisite:* 350)

ME 451 (1½) KODÁLY — MUSICIANSHIP: II
Continuation of 351; intermediate level. (*Prerequisite:* 351)

ME 460 (1½) KODÁLY — PEDAGOGY: III

Continuing study of techniques for developing rhythmic and tonal skills, curriculum development and lesson planning; includes study of upper intermediate repertoire (years 6-7). (*Prerequisite:* 450)

ME 461 (1½) KODÁLY — MUSICIANSHIP: III
Continuation of 451; advanced level. (*Prerequisite:* 451)

SPECIAL STUDIES

Contact individual professors or department Chair for information.

ED-A 480 (1½ or 3) CONTEMPORARY ISSUES IN EDUCATION — ARTS IN EDUCATION
Current topics and developments in education, with particular consideration of their relevance to the schools of British Columbia. This will be taught from an interdisciplinary approach. (With permission of the Education Advising Centre may be taken more than once for credit on a degree program) (3-0)

ED-A 487 (1½ or 3) SPECIAL TOPICS IN EDUCATION — ARTS IN EDUCATION
Topics of current interest or concern to groups of students. (With permission of the Education Advising Centre may be taken more than once for credit on a degree program) (3-0)

ED-A 494 (1½) DIRECTED STUDIES
Research projects, directed reading, or additional course work in a specified area. (All students must obtain written approval from the Education Advising Centre before registering. Permission will not normally be given for more than three units of directed studies.)

494A Art Education

494D Drama Education

494M Music Education

ED-A 495 (1½) DIRECTED STUDIES
(Description as for 494)

ED-A 499 (½-3) PROFESSIONAL DEVELOPMENT — ARTS IN EDUCATION
(This is a variable content course directed at improving specific teacher and/or administrator competencies. It will normally be offered off campus. Not more than 3 units of credit for any 499 courses may be approved as electives on an education degree program. Approval must be obtained from the Education Advising Centre.)
(Grading: COM, N, or F)

ED-A 750 (3-4½) CURRICULUM, INSTRUCTION AND PRACTICUM IN SECONDARY SCHOOL SUBJECTS — ART
Open to students who have completed the prescribed teaching area or who have special permission of the Education Advising Centre. Students will be denied the practicum experience (fall or spring) if their preparatory work is considered unsatisfactory by the Dean.
(Grading: INC; letter grade; INP)

ED-A 762 (3-4½) CURRICULUM, INSTRUCTION AND PRACTICUM IN SECONDARY SCHOOL SUBJECTS — MUSIC
Open to students who have completed the prescribed teaching area or who have special permission of the Education Advising Centre. Students will be denied the practicum experience (fall or spring) if their preparatory work is considered unsatisfactory by the Dean.
(Grading: INC; letter grade; INP)

ED-A 767 (3) CURRICULUM, INSTRUCTION AND PRACTICUM IN SECONDARY SCHOOL SUBJECTS — THEATRE
Open to students who have completed the prescribed teaching area or who have special permission of the Education Advising Centre. Students will be denied the practicum experience (fall or spring) if their preparatory work is considered unsatisfactory by the Dean.
(Grading: INC; INP; letter grade)

DEPARTMENT OF COMMUNICATION AND SOCIAL FOUNDATIONS

UNDERGRADUATE COURSES

ADULT EDUCATION

Dr. L.E. Devlin, Area Adviser

ED-B 336 (1½) PROGRAM PLANNING IN ADULT EDUCATION
An examination of the elements associated with the planning of educational programs for adult learners in a wide variety of social and institutional settings. Specific attention will be given to program planning models, needs assessment, analysis of participants, classroom processes and instructional design, evaluation, and practical program management. Each of these program planning elements will be examined both conceptually and within the context of their actual manifestation in current adult education practice. (3-0)

ED-B 436 (3) ADULT EDUCATION: CONCEPTS, THEORY AND PRACTICE
An identification of the theoretical basis of adult learning behaviour and the characteristics of adult education as a social and institutional practice. Topics include an operational definition of adult education, an historical development of the concept, an analysis of the various roles of persons involved with adult education, a review of the learning patterns of adults, an analysis of particular program emphasis in adult education, and the articulation of selected contemporary issues in the area. The concept of adult education is considered as separate from degree oriented higher education. (3-0)

ED-B 437 (1½) FACILITATING ADULT LEARNING
An examination of selected issues in fcilitating learning for adults including: a critical examination of the concept of Andragogy, self-directed learning and its facilitation, learning contracts, enhancing learner motivation, and cognitive/learning styles and their implications for adult learners. The course is intended for those individuals who will be involved in the design and conduct of education programs for adult learners. (3-0)

CURRICULUM STUDIES

Dr. A. Oberg, Area Adviser

ED-B 450 (1½, formerly 3) PRIMARY CURRICULUM IN THE CLASSROOM
The theory and practice of creating effective learning environments for the primary grades. To provide the background and critical perspective necessary for interpretation, selection, integration, implementation and evaluation of curricula. (*Prerequisite:* Professional Year. For P.D.P.P. students Professional Year is a corequisite) (3-0)

ED-B 451 (1½) INTERMEDIATE CURRICULUM IN THE CLASSROOM
Trends, research and issues of the intermediate/middle grades as a basis for curriculum development, organization and instruction. (*Pre-or corequisite:* Professional year. For P.D.P.P. students, Professional Year is a corequisite) (3-0)

ED-B 754C (3) CURRICULUM, INSTRUCTION AND PRACTICUM IN SECONDARY SCHOOL SUBJECTS — SECOND LANGUAGE (Spanish)
Open to students who have completed the prescribed teaching area or who have special permission of the Education Advising Centre. More than one of these courses can be taken with permission of the Education Advising Centre. Students will be denied the practicum experience (fall and spring) if their preparatory work is considered unsatisfactory by the Dean. (Grading: INC; INP; letter grade)

ED-B 788 (6) INSTITUTE FOR NATIVE LANGUAGE TEACHERS
An integrated program in current curriculum developments and methods of instruction for native language teachers. Limited to students enrolled in the Native Indian Language Teacher Training program.

EARLY CHILDHOOD EDUCATION

Dr. M. Mayfield, Area Adviser

ED-B 339 (1½) INTRODUCTION TO EARLY CHILDHOOD EDUCATION
An introductory survey of early childhood education designed as an initial orientation to teaching children ages three to six. The course provides an overview of typical programs, curricula, methods and materials found in early childhood education today. (3-0)

ED-B 440 (1½) EARLY CHILDHOOD EDUCATION
A comparative evaluation of contemporary issues and early childhood education program models to provide a theoretical basis for curriculum development. (*Pre-or corequisite:* 339 or consent of the instructor; Professional year (except students in Child Care) (3-0)

ED-B 441 (1½) EARLY CHILDHOOD EDUCATION CURRICULUM DEVELOPMENT
An in depth study of principles, procedures, related research and literature of early childhood education curriculum development emphasizing selection and application of methods, materials, and resources for teaching day care, preschool and kindergarten children. (*Prerequisite:* 440 or equivalent; Professional year (except students in Child Care) (3-0)

ED-B 448 (1½) SEMINAR AND PRACTICUM IN EARLY CHILDHOOD EDUCATION
Observation and supervised practice teaching in the preschool and kindergarten. Course activities include weekly half day observations and a seminar. A successful post session practicum, or a project, will be required. (*Pre-or corequisite:* 441 or consent of the instructor; Professional year) (3-0)

EDUCATIONAL ADMINISTRATION AND SUPERVISION

Dr. P.J. Murphy, Area Adviser

ED-B 430 (1½) THE ORGANIZATION AND ADMINISTRATION OF EDUCATION IN BRITISH COLUMBIA
Introduction to structure and process of the B.C. School System. Teacher-administration relationships. Emerging trends and controversial issues in school organization and practice. Value problems in the profession. School law and legal requirements. Public and professional relationships. Classroom management. (*Prerequisite:* Authorization to register in the Faculty of Education or permission of the Education Advising Centre) (3-0)

ED-B 431 (1½) INTRODUCTION TO EDUCATIONAL ADMINISTRATION
The meaning and purpose of educational administration. Concepts related to the theory, tasks, authority, processes of educational administration. The Administrator — characteristics, qualifications, selection, preparation. (*Pre-or corequisite:* Professional year) (3-0)

ED-B 435 (1½) SUPERVISION — SETTING, METHODS AND OVERVIEW
An examination of leadership, change, authority and power structures and organizational climate in supervision settings. Consideration given to evaluation, motivation, techniques available for the systematic observation and analysis of teaching, and supervision of program development and evaluation. (*Prerequisite:* Consent of the instructor) (3-0)

EDUCATIONAL FOUNDATIONS

Dr. T. Fleming, Area Adviser

ED-B 320 (1½) SOCIAL ISSUES IN CANADIAN EDUCATION
A colloquium to explore salient and current social issues relevant to provision of formal education in Canada. (3-0)

ED-B 420 (3) PHILOSOPHY OF EDUCATION
An introductory course dealing with the philosophical foundations of education and their implications for curriculum and instruction in the schools. (3-0)

ED-B 423 (3) HISTORY OF EDUCATION
Development of educational theory and practice from the time of ancient Greece to the present. (3-0)

ED-B 425 (3) ANTHROPOLOGY AND EDUCATION
Theory and perspectives from cultural anthropology relevant to the processes of education and operations of schools. (3-0)

ED-B 427 (3) SOCIOLOGY OF EDUCATION
The social structure of western civilization and its significance for education. (3-0)

ED-B 432 (1½) VALUE EDUCATION
An examination of the nature of value, the developmental and psychometric aspects of values, and some current practices in value education in schools. (3-0)

EDUCATIONAL TECHNOLOGY

Dr. G.D. Potter, Area Adviser

ED-B 359 (1) INTRODUCTION TO LEARNING RESOURCES 1.2 fee units
The role of resources in learning; utilization of materials in schools and the role of school libraries, laboratory in basic audio visual instructional techniques. (Grading: COM, N or F) (1-2)

ED-B 360 (1½) EDUCATIONAL TECHNOLOGY 2 fee units
The use of communications media in education. Practical experiences in the operation of audio visual and computing equipment and the utilization of instructional materials. Basic production skills in photography, audio and video taping. (2-2)

ED-B 361 (1½) ADVANCED EDUCATIONAL TECHNOLOGY 2 fee units
The theoretical and practical elements of educational technology: comparative study of contemporary theories of communication; in depth practical skills in one of television production, film making, photography, graphics, microcomputing, or audio production. (*Prerequisite:* 360) (2-2)

ED-B 362 (1½) THE MASS MEDIA AND EDUCATION
The history and development of mass media in North America; the effects of radio, television and film on children's home life and school experience; the educational uses of the mass media; current developments in educational television; satellite based interactive instructional systems. (Offered in 1985-86 and alternate years) (2-2)

ED-B 463 (1½) FILM AND EDUCATION
The theory, form and social function of film, and its utilization as an instructional resource in education; basic elements of composition; techniques of analysis, evaluation and incorporation into curriculum. (Offered in alternate years commencing 1984-85) (2-2)

LANGUAGE ARTS

Dr. J. Harker, Area Adviser

ED-B 290 (3) PRINCIPLES OF TEACHING NATIVE B.C. LANGUAGES AS SECOND LANGUAGE
The application of linguistic principles to teaching B.C. native languages in school native studies or native language retention programs; includes instructional methods, evaluation and program strategies, microteaching, observation and final practicum.

ED-B 331 (1½) INTRODUCTION TO THE STUDY OF LANGUAGE ARTS IN THE ELEMENTARY SCHOOL
An overview of teaching the language arts and developing oral and written skills through the use of children's literature. (Not available for credit on a degree program for students who have completed a professional year.) (*Prerequisite:* Authorization to register in the Faculty of Education or permission of the Education Advising Centre) (3-0)

ED-B 341 (3) LITERATURE IN THE ELEMENTARY SCHOOL
Survey of children's literature; selection of books for children; scope and sequence in the development of a literature program in the primary and intermediate grades. (3-0)

ED-B 342 (1½) FOUNDATIONS OF READING
Consideration of the processes and psychology of reading. (*Prerequisite:* Elementary professional year) (3-0)

ED-B 343 (1½) READING IN THE SCHOOL
Components of a total reading program: examination, evaluation, and construction of instructional materials; curricular organization. (Credit for only one of the following areas may be applied to a degree program) (3-0)
343A — Reading in the Primary Grades
343B — Reading in the Intermediate Grades
(*Prerequisites:* 342; professional year for students on an elementary program)
343C — Reading in the Secondary Schools
(*Corequisite:* Professional year)

ED-B 349 (3) LANGUAGE IN THE ELEMENTARY SCHOOL
Program development in listening, speaking and writing in the elementary school; principles and practices. (*Prerequisite:* Professional year) (3-0)

ED-B 350 (3) FOUNDATIONS OF READING AND WRITING IN THE SECONDARY GRADES
A study of the nature and development of reading and writing abilities in the secondary grades with specific reference to the linguistic and psychological bases of the reading and writing processes. Emphasis will be placed on the integrative nature of language processes and the place of speaking and listening in the development of reading and writing. (3-0)

ED-B 371 (3) (formerly 351, 471) LITERATURE FOR YOUNG ADULTS
A survey of standard, classic, and current literature for the adolescent with attention to the adolescent's response to literature and the stimulation of reading through appropriate selection of literature for young adults. Specific readings may be required in advance for this course. (3-0)

ED-B 442 (3) CORRECTIVE READING INSTRUCTION
A course covering classroom diagnosis and treatment of reading difficulties; prevention of reading disabilities; corrective classroom procedures. Students will become familiar with materials and procedures for the correction of various types of reading disabilities. This course is useful to the classroom teacher and to the reading specialist. A portion of the course may involve remedial work in a school setting. (*Pre-or corequisite:* Professional year, and 342 or permission of the instructor. Students in the Learning Assistance teaching area will be allowed to take this course without 342 provided they have completed the professional year.) (3-0; 3-0)

ED-B 490 (3) PRINCIPLES OF TEACHING SECOND LANGUAGES
The application of principles for teaching second languages. The examination of curriculum and methodology for use in second language programs in the elementary and secondary schools. (*Prerequisite:* Professional year) (3-0)

ED-B 748 (1½) READING INSTRUCTION IN THE ELEMENTARY SCHOOL (Primary or Intermediate Grade Emphasis)
A study of the elementary reading curriculum emphasizing selection and application of materials, resources and methods for teaching reading. (*Prerequisite:* Acceptance in a professional year) (2-0)

ED-B 748A (1½) READING INSTRUCTION IN THE ELEMENTARY SCHOOL (Primary or Intermediate Grade Emphasis)
Course content as for 748 with application for native language teachers. (Limited to students enrolled in the Native Indian Language Teacher Training program.) (2-0)

ED-B 749 (1½) ORAL AND WRITTEN EXPRESSION IN THE ELEMENTARY SCHOOL (Primary or Intermediate Grade Emphasis)

A study of the elementary language arts curriculum emphasizing selection and application of materials, resources and methods for teaching oral and written expression. (*Prerequisite:* Acceptance in a professional year) (2-0)

ED-B 749A (1½) ORAL AND WRITTEN EXPRESSION IN THE ELEMENTARY SCHOOL (Primary or Intermediate Grade Emphasis)

Course content as for 749 with application for native language teachers. (Limited to students enrolled in the Native Indian Language Teacher Training program). (2-0)

ED-B 753 (3-4½) CURRICULUM, INSTRUCTION AND PRACTICUM IN SECONDARY SCHOOL SUBJECTS — ENGLISH

Open to students who have completed the prescribed teaching area or who have special permission of the Education Advising Centre. Students will be denied the practicum experience (fall or spring) if their preparatory work is considered unsatisfactory by the Dean. (Grading: INC; INP; letter grade)

ED-B 754 (3-4½) CURRICULUM, INSTRUCTION AND PRACTICUM IN SECONDARY SCHOOL SUBJECTS — SECOND LANGUAGE

754A (3-4½) French 754B (3) German

Open to students who have completed the prescribed teaching area or who have special permission of the Education Advising Centre. More than one of these courses can be taken with permission of the Education Advising Centre. Students will be denied the practicum experience (fall or spring) if their preparatory work is considered unsatisfactory by the Dean. (Grading: INC; INP; letter grade)

SPECIAL STUDIES

Contact individual Professors or Department Chair for information.

ED-B 390 (3) CLASSROOM TECHNIQUES IN TEACHING ORAL FRENCH

This course includes analysis of theoretical and practical elements of teaching French as a second language. Students will be introduced to the B.C. Curriculum Guide, methods of presentation, and use of aids. Special attention will be given to automated language teaching. (*Pre- or corequisite:* A working knowledge of oral French, as determined by the instructor) (3-0-1)

ED-B 480 (1½ or 3) CONTEMPORARY ISSUES IN EDUCATION — COMMUNICATION AND SOCIAL FOUNDATIONS

Current topics and developments in education, with particular consideration of their relevance to the schools of British Columbia. This will be taught from an interdisciplinary approach. (With permission of the Education Advising Centre may be taken more than once for credit on a degree program) (3-0)

ED-B 487 (1½ or 3) SPECIAL TOPICS IN EDUCATION — COMMUNICATION AND SOCIAL FOUNDATIONS

Topics of current interest or concern to groups of students. (With permission of the Education Advising Centre may be taken more than once for credit on a degree program) (3-0)

ED-B 494 (1½) DIRECTED STUDIES

Research projects, directed reading, or additional course work in a specified area. (All students must obtain written approval from the Education Advising Centre before registering. Permission will not normally be given for more than three units of directed studies.)

494A Adult Education
494D Early Childhood Education
494E Educational Administration
494F Educational Foundations
494G Educational Technology
494J Teaching of English
494K Language Arts
494L Teaching of a Second Language
494Q Library Education

ED-B 495 (1½) DIRECTED STUDIES

(Description as for 494)

ED-B 499 (½-3) PROFESSIONAL DEVELOPMENT — COMMUNICATION AND SOCIAL FOUNDATIONS

This is a variable content course directed at improving specific teacher and/or administrator competencies. It will normally be offered off campus. Not more than 3 units of credit for any 499 courses may be approved as electives on an education degree program. Approval must be obtained from the Education Advising Centre.) (Grading: COM, N or F)

LIBRARY EDUCATION

Mr. D. Hamilton, Area Adviser

L E 432 (1½) THE SCHOOL LIBRARY AND THE TEACHER

The library as a vital part of the teacher's program, its philosophy and services. For all teachers — elementary and secondary. (3-0)

L E 433 (1½) THE SCHOOL LIBRARIAN

The role of the school librarian, administration of a school library, staffing supervision. (*Prerequisite:* Professional year) (3-0)

L E 434 (1½) SCHOOL LIBRARY MATERIALS

The evaluation, selection and acquisition of learning materials in all media formats. (Credit for only one of the following areas may be applied to a program.)

434A — Elementary school emphasis

434B — Secondary school emphasis

(*Prerequisite:* Professional year) (3-0)

L E 435 (1½) CATALOGUING AND CLASSIFICATION FOR SCHOOL LIBRARIES

The principles and practice of basic classification systems and cataloguing rules applied to the needs of the school library. (*Prerequisite:* Professional year) (3-0)

L E 437 (1½) REFERENCE SERVICES FOR SCHOOL LIBRARIES

The role of reference materials in meeting students' and teachers' needs. (Credit for only one of the following areas may be applied to a degree program.) (3-0)

437A — Elementary school emphasis

437B — Secondary school emphasis

(*Prerequisite:* Professional year) (3-0)

L E 438 (1½) PROBLEMS AND ISSUES IN SCHOOL LIBRARIANSHIP

Addresses current problems and issues facing school librarianship. (*Prerequisites:* 432 and professional year) (May be repeated for credit) (3-0)

SCHOOL OF PHYSICAL EDUCATION

UNDERGRADUATE COURSES

Dr. F.I. Bell, Elementary and Secondary Adviser
Dr. D.R. Nichols, Leisure Studies Adviser
Dr. G.H. Van Gyn, Human Performance Adviser

P E 104-132 SKILL PERFORMANCE AND ANALYSIS
The following courses are intended for students pursuing degrees in Physical Education (B.Ed., B.A., and B.Sc.). They are designed to develop each participant's level of performance, ability to analyze skills, and understanding of strategies or concepts.

NOTES:

1. Not all activities may be offered every year.
2. Maximum credit for activities in degree programs offered by the Faculty of Education is specified on page 156.
3. Each activity course is scheduled for 24 hours of instruction. Students on Physical Education programs are expected to complete most of the required activity courses in the first two years.
4. Activity courses completed prior to September 1, 1975 will not receive credit.

P E 104 (½) SPECIAL ACITIVITY
With special permission, may be taken more than once for credit on a degree program

P E 105 (½) SWIMMING

P E 106 (½) TRACK AND FIELD

P E 107 (½) GYMNASTICS: I

P E 108 (½) GYMNASTICS: II
(*Prerequisite:* 107)

P E 109 (½) RECREATIONAL DANCE

P E 110 (½) RHYTHMICS

P E 111 (½) CURLING

P E 112 (½) ARCHERY

P E 113 (½) GOLF

P E 114 (½) CREATIVE DANCE

P E 115 (½) FITNESS AND CONDITIONING

P E 116 (½) BADMINTON

P E 117 (½) TENNIS

P E 118 (½) WRESTLING

P E 119 (½) CONTEMPORARY DANCE

P E 120 (½) BASKETBALL

P E 121 (½) SOCCER

P E 122 (½) VOLLEYBALL

P E 123 (½) RUGBY

P E 124 (½) FIELD HOCKEY

P E 125 (½) SOFTBALL

P E 126 (½) ORIENTEERING (User fee)

P E 127 (½) CANOEING (User fee)

P E 128 (½) CROSS COUNTRY SKIING (User fee)

P E 129 (½) BACK PACKING (User fee)

P E 130 (½) ROCK CLIMBING (User fee)

P E 131 (½) SAILING (User fee)

P E 132 (½) KAYAKING (User fee)

P E 141 (1½) INTRODUCTORY HUMAN ANATOMY
Lecture and laboratory orientation to human anatomy. Emphasis on the basic anatomical structures used in locomotion and fundamental motor skills. Reference made to the structural components of the circulatory, digestive, excretory and endocrine systems. Labs include examination and dissection of mammalian specimens, and extensive use of human skeletons, anatomical charts and models. (Not available for credit on a degree program for students who have already completed 242) (3-2)

P E 142 (1½) HUMAN POTENTIAL
This course is primarily designed for students wishing to pursue a teaching career and examines some of the factors associated with physical, emotional and social growth on a personal level, and the way in which healthy behaviours and attitudes can be modelled and transmitted to students. Using the physical performance model as an initial paradigm, behaviours which have the power to enhance or diminish human potential will be studied. Focus areas include physical activity and health; body mechanics; decision making for health; healthy consumerism; nutrition/weight control; goal setting; substance use/abuse; interpersonal relationships; the cultural imperative. (3-0)

P E 143 (1½) INTRODUCTION TO PHYSICAL EDUCATION
Orientation to the profession; the aims and objectives of physical education; relationship of physical education to education, athletics, health, recreation, and safety education. (3-0)

P E 144 (1½) ACTIVE HEALTH
This course will prepare students to deal with many of the topics included under Lifespan Education. These include physical fitness, nutrition, use of leisure time, safety, substance abuse, and a general preparation to make informed decisions that affect personal well being. (3-0)

P E 147 (2) PHYSICAL EDUCATION FOR GENERAL CLASSROOM TEACHERS (Elementary)
Content of the Physical Education program in elementary school; principles, practice and techniques of instruction. (Not available for credit on a degree program for students who have already completed 149 or ED-C 747) (*Prerequisite:* Authorization to register in the Faculty of Education or permission of the School of Physical Education) (2-1)

P E 241A (1½) INTRODUCTION TO HUMAN CELLULAR PHYSIOLOGY
The study of the molecular and cellular functions in man with emphasis on homeostasis, cellular transport, protein synthesis, energy metabolism, electrical properties of cells, and blood as a tissue. (3-2)

P E 241B (1½) INTRODUCTION TO HUMAN SYSTEMIC PHYSIOLOGY
The study of the integrated functions of physiological systems with emphasis on the nervous, endocrine, muscular, cardiovascular and respiratory systems. (*Prerequisite:* 141 or consent of the instructor) (Not available for credit on a degree program for students who have already completed 242) (3-2)

P E 243 (1½) FOUNDATIONS OF RECREATION AND LEISURE
An introduction to the nature and scope of recreation; a consideration of past influences and future trends; the role of the recreational professional. (3-0)

P E 244 (formerly 343) (1½) CANADIAN RECREATION DELIVERY SYSTEMS
An overview of the development and delivery of recreational programs in Canada. Canadian federal, provincial, municipal, private and volunteer agencies are described and analyzed. (3-0)

P E 245 (1½) FOUNDATIONS OF SKILL ACQUISITION AND SKILL ANALYSIS
This course examines the theoretical bases of skill learning. The major variables affecting performance and learning will be examined. The cognitive and physical components of skill acquisition will be analyzed. (3-0)

P E 252 (formerly 352) (1½, formerly 3) LEADERSHIP METHODS FOR RECREATION
Methods of leadership and methods of teaching leisure skills. Classes will provide skills in presenting material to different age groups. Field experience is required as part of this course. (3-0)

P E 253 (formerly 353 and half of 352) (1½) PROGRAM PLANNING FOR RECREATION
An analysis of theoretical and practical approaches for developing effective recreation programs. (3-0)

P E 270 (1½) FOUNDATIONS OF OUTDOOR RECREATION
Study of the outdoor environment as an educational and recreational medium; survey of local outdoor recreational facilities; focus on planning, implementation and evaluation of outdoor programs, outdoor/environmental ethics and safety considerations; exploration of the relationship between outdoor pursuits and the leisure services. (3-0)

P E 341 (1½) BIOMECHANICS (formerly Kinesiology)
Analysis of human movement and performance. The relationship of the laws of physics concerning motion, force, inertia, levers, etc., to muscular and mechanical analysis of motor skills. (3-0)

P E 342 (1½) HISTORY OF PHYSICAL EDUCATION (formerly History and Principles of Physical Education)
Interpretative study and analysis of physical education and sport through their historical development; current trends, social and cultural implications; relationship to education. (3-0)

P E 344 (1½) CARE AND PREVENTION OF ATHLETIC INJURIES
Training techniques, protective equipment and strapping for the prevention of athletic injuries; emergency procedures and first aid practices for the treatment of athletic injuries; care and retraining of injured areas. Field experience is required as part of this course. (*Prerequisite:* 141 and 241B or equivalent) (3-0)

P E 345 (1½) PHYSICAL EDUCATION IN EARLY CHILDHOOD
Methods of teaching physical education activities to young children with emphasis on primary grades. Instructional techniques, activities, and curriculum development for this age group will be included. Field experience (approximately 10 hours) is required as part of this course. (*Prerequisites:* 147 or 149 or ED-C 747; and authorization to register in the Faculty of Education) (3-0)

P E 346 (1½) MOTOR DEVELOPMENT AND PHYSICAL MATURATION
An overview of motor development and maturation from the neonate to adulthood and old age. Special attention will be given to the growth and motor development characteristics of elementary and secondary school children. (No prerequisite required but a background in anatomy recommended) (3-0)

P E 347 (1½) COMPARATIVE PHYSICAL EDUCATION
An in depth study of physical education and sport systems in selected countries. (3-0)

P E 348 (ED-D 348) (1½) PSYCHOLOGY OF SPORT
An examination of the current findings in psychological research into sport and physical activity with special attention to personality characteristics of the performer, motivation for performance, cohesiveness, and spectator behaviour. (*Prerequisite:* PSYC 100) (2-2)

P E 349 (1½) TEACHING PHYSICAL EDUCATION IN EARLY CHILDHOOD
Techniques for teaching fundamental motor skills and activities to young children. Emphasis will be on primary grade children with special attention devoted to the appropriate scope and sequencing of skills and activities. (Not available for credit on a degree program for students who are taking a Physical Education teaching area or concentration or who have credit for PE 345) (Offered only during Summer Studies) (3-0)

P E 351 (1½) HUMAN WELLNESS
This course is designed to equip students to build on their knowledge of the physical fitness aspects of health and to allow them to contribute to the growing fields of health promotion and wellness. Topics will include: studies of epidemiological information about the fitness and lifestyle of North Americans; the role of physical activity in stress management and stress reduction; the role of eating and exercise styles in weight management; an analysis of motivational programs designed to enhance personal and professional performance; an ecological perspective on personal and global health. (3-0)

P E 352 (formerly one half of 452) (1½) INSTRUCTIONAL TECHNIQUES IN INDIVIDUAL ACTIVITIES (SECONDARY)
Methods of teaching individual activities to secondary school and related groups. Field experience is required as part of this course. (*Prerequisites:* Three of 105-119 and authorization to register in the Faculty of Education) (3-0)

P E 354A (formerly 453A) (1½) ADMINISTRATION OF LEISURE SERVICES: I
A review of general administrative and organizational theories with particular reference to their application in leisure service agencies. Topics include: the nature of administration, structure of organizations, leadership, supervision of workers and supervision of clients. (3-0)

P E 354B (formerly 453B) (1½) ADMINISTRATION OF LEISURE SERVICES: II
A continuation of 354A, including budgeting, financial control, policy making, planning, goal setting, performance appraisal, public relations, meetings, office management, executive distress, and legal issues. (*Prerequisite:* 354A) (3-0)

P E 356 (1½) PRINCIPLES OF FACILITY ADMINISTRATION
Study of the concepts and processes of management as they apply to leisure service, recreation, fitness and health facilities. Emphasis on problem solving techniques used by administrators and managers in the planning, designing, controlling, financing, renovating and maintaining of such facilities. (3-0)

P E 360 (1½) THE PRESCRIPTION OF EXERCISE
This course will examine the principles of exercise and their application for the acquisition of health and/or performance in children, adults and special populations such as athletes, the elderly, and the obese. (3-2)

P E 361 (1½) COACHING STUDIES
An in depth study of coaching theory. Students who successfuly complete the course will receive the Coaching Association of Canada's Level 1 and 2 theory certification. The course will require a practical coaching experience in a sport of the student's choice.
(Grading: INP; letter grade) (3-3)

P E 441 (1½) EXERCISE PHYSIOLOGY
The anatomical and physiological adaptation of the human body to exercise and training; the relationship of exercise to hypokinetic diseases; nutrition of the athlete. (*Prerequisite:* 241A and B or 242) (2-2)

P E 442 (1½) MOTOR LEARNING
Implications of perceptual motor development for learning; psychology of motor skill acquisition. (*Prerequisite:* 3rd year standing in a Physical Education program) (2-2)

P E 443 (1½) ORGANIZATION AND ADMINISTRATION OF PHYSICAL EDUCATION
Nature and function of administration; management of equipment and facilities; organization and management of programs of physical education and athletics; survey of the organization in Canadian schools. (*Prerequisites:* 4th year standing in a Physical Education program; and authorization to register in the Faculty of Education) (3-0)

P E 444 (1½) MEASUREMENT AND EVALUATION IN PHYSICAL EDUCATION
Use of laboratory and field tests in the assessment of physical performance and physique. Test administration and interpretation of results. (A background in physiology recommended) (2-2)

P E 445 (1½) DEVELOPMENTAL AND ADAPTIVE PHYSICAL ACTIVITY
This course examines physical education and recreation activities for atypical individuals. Methods of assessing physical performance, adapting equipment and facilities and applying programming techniques will be explored. Field experience is required as part of this course. (3-0)

P E 446 (1½) PHYSICAL EDUCATION IN THE INTERMEDIATE GRADES
Methods of teaching physical education activities to intermediate grade children. Instructional techniques and curriculum development for this age group will be included. Field experience (approximately 10 hours) is required as part of this course. (*Prerequisites:* 147 or 149 or ED-C 747; and authorization to register in the Faculty of Education) (3-0)

P E 447 (1½, formerly 3) (formerly 447B) COMMUNITY PROGRAMS IN HUMAN PERFORMANCE: SUPERVISED PRACTICUM
Students are required to work in a community program which has as its focus a health, leisure, or sports service. The practicum will involve aspects of program planning and, where possible, direct leadership responsibilities. Emphasis will be placed on understanding the structure and function of community programs. (*Prerequisite:* 253; 4th year standing in a Physical Education program) (1-6)

P E 448 (1½) TEACHING PHYSICAL EDUCATION IN THE INTERMEDIATE GRADES
Techniques for teaching skills related to games, gymnastics and dance. Emphasis will be on intermediate grade children with special attention devoted to the appropriate scope and sequencing of skills and activities. (Not available for credit on a degree program for students who are taking a Physical Education teaching area or concentration or who have credit for PE 446) (Offered only during Summer Studies) (3-0)

P E 449 (1½) PHYSICAL PARAMETERS OF AGING
An overview of the anatomical and physiological changes associated with human aging. Relationships between hypokinetic (inactivity induced) disease, stress, and nutritional habits to aging and the merits of various intervention strategies. (3-0)

P E 451 (1½) ADULT FITNESS AND EXERCISE MANAGEMENT
A study of the theory and practice of adult physical fitness as it relates to health enhancement and preventive medicine. (3-0)

P E 452 (1½, formerly 3) INSTRUCTIONAL TECHNIQUES IN TEAM ACTIVITIES (SECONDARY)
Methods of teaching team activities to secondary school and related groups. Field experience is required as part of this course. (*Prerequisites:* Three of 120-125 and authorization to register in the Faculty of Education) (3-0)

P E 454A (½) CONTEMPORARY ISSUES IN RECREATION: I
Addresses the problems and challenges facing the recreation profession. (*Prerequisites:* Completion of three work terms in the Leisure Studies Program; and authorization to register in the Faculty of Education) (1-0)

P E 454B (1) CONTEMPORARY ISSUES IN RECREATION: II
Addresses the problems and challenges facing the recreation profession and attempts to provide a synthesis for the graduating student. (*Prerequisites:* Completion of 454A and four work terms in the Leisure Studies program or consent of instructor; and authorization to register in the Faculty of Education) (2-0)

P E 460 (1) HONOURS SEMINAR
Seminars will be arranged by the School and are compulsory for 4th year Honours students. (Grading: COM, N, OR F)

P E 461 (½) ADVANCED SKILLS AND OFFICIATING
In depth study of skill areas selected by the student, including advanced skill performance and officiating to an approved level. (Students in a secondary program must register in three of the areas listed below at ½ unit each. A student may take all of the following areas; however, the maximum number of units accepted for credit on the student's degree program will be at the discretion of the School.) (*Prerequisite:* Credit in the related 100 level course) (NOTE: Not every area will be offered each year. Candidates are asked to consult the School of Physical Education before registering.) (1-0)

461A	Badminton	461G	Soccer
461B	Basketball	461J	Swimming
461C	Dance	461K	Tennis
461D	Field Hockey	461L	Track and Field
461E	Gymnastics	461M	Volleyball
461F	Rugby		

P E 470 (1½) OUTDOOR RECREATION (ADVANCED)
Examination of outdoor recreation skills as a teaching medium; focus on professional outdoor recreation leadership skills, knowledge and techniques. (*Prerequisites:* 270 and three outdoor activities chosen from 126-132, or consent of instructor) (2-2)

P E 499 (3) HONOURS THESIS OR TUTORIAL
Research under the direction of faculty for Honours students only. (Grading: INP, letter grade)

ED-C 480 (1½ or 3) CONTEMPORARY ISSUES IN EDUCATION — PHYSICAL EDUCATION
Current topics and developments in education, with particular consideration of their relevance to the schools of British Columbia. This will be taught from an interdisciplinary approach. (With permission of the Education Advising Centre may be taken more than once for credit on a degree program) (3-0)

ED-C 487 (1½ or 3) SPECIAL TOPICS IN EDUCATION — PHYSICAL EDUCATION
Topics of current interest or concern to groups of students. (With permission of the Education Advising Centre may be taken more than once for credit on a degree program) (3-0)

ED-C 494 (1½) DIRECTED STUDIES
Research projects, directed reading, or additional course work in a specified area. (All students must obtain written approval from the Education Advising Centre before registering. Permission will not normally be given for more than three units of directed studies.)
494V Physical Education

ED-C 495 (1½) DIRECTED STUDIES
(Description as for 494)

ED-C 499 (½-3) PROFESSIONAL DEVELOPMENT — PHYSICAL EDUCATION
(This is a variable content course directed at improving specific teacher and/or administrator competencies. It will normally be offered off campus. Not more than 3 units of credit for any 499 courses may be approved as electives on an education degree program. Approval must be obtained from the Education Advising Centre.)
(Grading: COM, N, or F)

ED-C 764 (3-4½) CURRICULUM, INSTRUCTION AND PRACTICUM IN SECONDARY SCHOOL SUBJECTS — PHYSICAL EDUCATION
Open to students who have completed the prescribed teaching area or who have special permission of the Education Advising Centre. Students will be denied the practicum experience (fall or spring) if their preparatory work is considered unsatisfactory by the Dean.
(Grading: INC; letter grade; INP)

DEPARTMENT OF PSYCHOLOGICAL FOUNDATIONS IN EDUCATION

UNDERGRADUATE COURSES

COMMUNICATION AND COUNSELLING

Dr. R.V. Peavy, Area Adviser

ED-D 316 (1½) VERBAL COMMUNICATION
Study of interpersonal verbal skills and processes. Skill practice and analyzed applications to classroom, counselling, family, social work and mental health. (3-0)

ED-D 317 (1½) NONVERBAL COMMUNICATION
Study of nonverbal interactions: movement, posture, gesture, qualities of voice, and spacing. Analysis of implications in teaching, counselling, family relations, mental health. (3-0)

ED-D 414 (3) GROUP PROCESSES
Analysis of group decision making; discovery and discussion methods in group learning; study of group interaction in classrooms, family life, counselling, and mental health. First portion of course is devoted to skill development, second part to analysis, theory and research. (3-0)

ED-D 417 (3) HELPING RELATIONSHIPS
Study of helping relationships in the classroom, counselling, family life, and mental health. Theories of personal effectiveness; analysis and practice of effective relating skills. The course is conducted as a participative seminar and includes skill building laboratory experience. (3-0)

ED-D 418 (1½) COMPUTER ASSISTED CAREER COUNSELLING
This course is designed to provide the theory, processes, and practice necessary for effective use of computer assistance in career counselling in education. NO(2-2)

ED-D 433 (1½) PSYCHOLOGICAL EDUCATION
A study of the concepts and practices of psychological education; examines how the school, family and community can mutually support the personal growth of individuals through educational means. (*Prerequisite:* 316 or 417) NO(3-0)

ED-D 434 (1½) FAMILY EDUCATION AND CONSULTATION
Topics include: current theories and practices in family life education and family counselling; school-community perspectives on family life education; use of potential resources for strengthening family life. (*Prerequisites:* 414 or 417 or consent of the instructor) NO(3-0)

ED-D 435A (1½) PEER COUNSELLING
An examination of the use of peers in the helping/learning process; topics include the theory and research on cross-age tutoring, peer helping, peer assisted learning, and peer counselling. Emphasis will be placed on skill building and training expertise necessary to organize and train a variety of peer groups in educational and community settings. (*Prerequisite:* 417 or 414 or 316 or consent of instructor) (Normally not offered on campus during winter session) (3-0)

ED-D 435B (1½) PEER COUNSELLING: PROGRAM IMPLEMENTATION
This course will cover the variety of strategies used to develop and implement a peer program. Topics such as initiating change, consulting with decision-makers, organizing support groups, creating an effective training curriculum and evaluation approaches will be examined. Participants will be expected to have direct access to community or education settings to implement program plans. (*Prerequisite:* 435A or consent of instructor) (Normally not offered on campus during winter session) (3-0)

LEARNING AND DEVELOPMENT

Dr. B. Timmons, Area Adviser

ED-D 300 (formerly 200) (1½) INTRODUCTION TO EDUCATIONAL PSYCHOLOGY
The application of psychological principles to elementary classroom practice. (Credit toward a program cannot be granted for more than one of 200, 200A, 200B, 300, 303 or 401.) (*Prerequisite:* Authorization to register in the Faculty of Education or permission of the Education Advising Centre)

ED-D 305 (3) PSYCHOLOGY OF CHILDHOOD
Mental, social, emotional and physical characteristics of preschool and elementary school pupils, their interests and problems; emphasis upon classroom implications. (*Prerequisite:* Authorization to register in the Faculty of Education or permission of the Education Advising Centre) (3-0)

ED-D 306 (1½) ADVANCED EDUCATIONAL PSYCHOLOGY: CHILD DEVELOPMENT DURING THE PRESCHOOL YEARS
An advanced course with special emphasis on early education; consideration of language, motor skills, and cognitive development, from birth to six years. Observation techniques, the interview, and other approaches to child study will be stressed. (*Prerequisite:* 305 or equivalent) (3-0)

ED-D 348 (PE 348) (1½) PSYCHOLOGY OF SPORT
An examination of the current findings in psychological research into sport and physical activity with special attention to personality characteristics of the performer, motivation for performance, cohesiveness, and spectator behaviour. (*Prerequisite:* PSYC 100) (2-2)

ED-D 401 (formerly 303) (1½) INTRODUCTION TO PSYCHOLOGY OF CLASSROOM LEARNING
An introduction to the psychology of learning in the secondary school. (Credit toward a program cannot be granted for more than one of 200, 200A, 200B, 300, 303 or 401) (3-0)

ED-D 406 (3) PSYCHOLOGY OF ADOLESCENCE
The physiological, psychological, social, and educational aspects of adolescence. (3-0)

MEASUREMENT, EVALUATION AND COMPUTER APPLICATIONS IN EDUCATION

Dr. W. Muir, Area Adviser

ED-D 337 (1½) EVALUATION OF STUDENT ACHIEVEMENT
The construction of classroom measures; including rating scales, self reports, check lists, performance tests, essay and objective tests, organization and use of measurement data. (*Pre-or corequisite:* Professional year) (3-0)

ED-D 338 (1½) MICROCOMPUTERS IN THE CLASSROOM
An introduction to the concepts and skills required by teachers for effective classroom microcomputer use; modes of computer aided learning; strategies for developing computer literacy. (*Prerequisite:* Professional year or consent of instructor) (3-0)

ED-D 402 (1½) ASSESSMENT FOR SPECIAL EDUCATION
This course is designed to provide an in depth study of the area of assessment of the exceptional child. Topics include techniques, methods and purposes of assessment, factors important in selecting and administering standardized tests for the purpose of planning educational alternatives, technical information required to interpret tests adequately, and limitations on interpretation. Emphasis will be placed on intelligence tests, achievement tests, and diagnostic reading tests, mathematics tests, and written language tests used in the province of British Columbia. (*Prerequisite:* 337 or consent of instructor) (Note: It is recommended that students take 405 first or concurrently with this course) (3-0)

ED-D 438 (1½) MICROCOMPUTERS AND THE CURRICULUM
Evaluation of educational software with an emphasis on integrating microcomputer use with curricula; creation of program materials; consideration of the effects of microcomputers on their users. (*Prerequisite:* 338 or consent of instructor) (3-0)

SPECIAL EDUCATION

Dr. D.G. Bachor, Area Adviser

ED-D 400 (formerly 713) (1½) LEARNING DIFFICULTIES IN THE ELEMENTARY CLASSROOM

An introduction to the nature, scope and recognition of learning difficulties commonly encountered in the elementary grades. Emphasis is placed on ineffective learning behaviour patterns and the development of a repertoire of interactional and instructional teacher strategies for effective in-classroom remediation. Severe problems in learning and behaviour will be discussed briefly. (*Pre- or corequisite:* Professional year)

(2-0)

ED-D 405 (3) EDUCATIONAL EXCEPTIONALITY

An introductory survey course intended to familiarize students with the needs of children and adolescents with varying exceptionalities. Topics include history of special education services, parents and families of special needs children, mental retardation, learning disabilities, emotional disturbance, the gifted, children with speech and language problems, hearing and vision loss, physical impairments, and chronic health problems. (*Prerequisite:* 300 or 305 or 401 or 406) (Note: 405 is normally a pre- or co-requisite course for 410A and 415) (3-0)

ED-D 409A (1½) EDUCATION OF THE EXCEPTIONAL CHILD — THE GIFTED

Identification procedures; early school admission and acceleration; setting goals for instruction; effective teaching methods; currently operating programs. (*Prerequisite:* Professional year) (3-0)

ED-D 410A (1½) EDUCATION OF THE MENTALLY RETARDED

A consideration of objectives, methods and materials in educating the mentally retarded, and of research evidence on instructional program effectiveness. Topics include: identification; physiological causes; environmental and social variables related to mental retardation; cognitive, personal, social and physical characteristics; programming for the child and adult. (*Pre-or corequisites:* 405; professional year.) (NOTE: The professional year prerequisite is waived for students in the School of Child and Youth Care.)

(3-0)

ED-D 411 (1½ or 3) PROBLEMS OF ATTENTION AND BEHAVIOUR

Supervised practice and/or theoretical considerations in working with children who present mild to severe problems in behaviour. (The course is offered in two sections, as described below, and only one of these is scheduled in any given session. Consult the Department for further information.) (*Pre-or corequisite:* Professional year) (NOTE: The professional year prerequisite is waived for students in the School of Child Care.)

ED-D 411A (1½) A consideration of objectives and methods in working with children who present mild to severe problems in behaviour. Strategies for working with individuals and groups are presented and evaluated. (Not available for credit on a degree program for students who have completed 411B)

(3-0)

ED-D 411B (3) A consideration of objectives and methods in working with children who present mild to severe problems in behaviour. Strategies for working with individuals and groups are presented, evaluated and practised. Students enrolling in this course must reserve two one and a half hour periods in their timetables in either mornings or afternoons for the required practicum component. (Not available for credit on a degree program for students who have completed 411A)

NO(2-2)

ED-D 415 (3) DIAGNOSIS AND REMEDIATION OF LEARNING DIFFICULTIES

A consideration of assessment strategies and instructional methods and materials appropriate for the identification and remediation of learning difficulties. (Students in this course must reserve three one hour periods in their timetables for the required practicum. During this practicum component, the concentration is on language arts and mathematics.) (It is recommended that students take the following courses first or concurrently with this course: 405, ED-B 442, ED-E 484.) (*Prerequisite:* Professional year) (NOTE: The professional year prerequisite is waived for students in the School of Child Care.) (3-3)

ED-D 496 (1½) PRACTICUM IN SPECIFIED AREAS OF TEACHING

Supervised practice in teaching children who learn inefficiently or ineffectively in regular classroom settings. A post session practicum in May normally will be required. (A student may take all of the following areas; however, the maximum number of units accepted for credit on a student's degree program will be at the discretion of the Education Advising Centre.)

496A Teaching the gifted child.
Pre-or corequisite: 409A; professional year

496C Teaching the mentally retarded.
Pre-or corequisite: 410A; professional year

496E Teaching the child with attention or behaviour problems.
Pre-or corequisite: 411A; professional year

496F Teaching the child with learning disabilities.
Pre-or corequisite: 415; professional year

(Students anticipating enrollment in 496 should make early inquiry to the Department of Psychological Foundations in Education to determine availability of supervisory personnel and school placement. In general, course activities require a time commitment of one half day per week throughout the second term.)

(Grading: INC; COM, N, or F)

SPECIAL STUDIES

Contact individual Professors or Department Chair for information.

ED-D 480 (1½ or 3) CONTEMPORARY ISSUES IN EDUCATION — PSYCHOLOGICAL FOUNDATIONS

Current topics and developments in education, with particular consideration of their relevance to the schools of British Columbia. This will be taught from an interdisciplinary approach. (With permission of the Education Advising Centre may be taken more than once for credit on a degree program)

(3-0)

ED-D 487 (1½ or 3) SPECIAL TOPICS IN EDUCATION — PSYCHOLOGICAL FOUNDATIONS

Topics of current interest or concern to groups of students. (With permission of the Education Advising Centre may be taken more than once for credit on a degree program)

(3-0)

ED-D 494 (1½) DIRECTED STUDIES

Research projects, directed reading, or additional course work in a specified area. (All students must obtain written approval from the Education Advising Centre before registering. Permission will not normally be given for more than three units of directed studies.)

494B Helping Profession

494H Educational Psychology

494S Special Education

494W Remedial

ED-D 495 (1½) DIRECTED STUDIES

(Description as for 494)

ED-D 499 (½-3) PROFESSIONAL DEVELOPMENT — PSYCHOLOGICAL FOUNDATIONS

(This is a variable content course directed at improving specific teacher and/or administrator competencies. It will normally be offered off campus. Not more than 3 units of credit for any 499 courses may be approved as electives on an education degree program. Approval must be obtained from the Education Advising Centre.)

(Grading: COM, N, or F)

DEPARTMENT OF SOCIAL AND NATURAL SCIENCES

UNDERGRADUATE COURSES

MATHEMATICS EDUCATION

Dr. W. Liedtke, Elementary Adviser, Primary
Dr. I. Burbank, Elementary Adviser, Intermediate
Dr. L. Francis, Secondary Adviser

ED-E 343 (1½) MATHEMATICS: A HUMAN ENDEAVOUR
A study of the foundations and processes of mathematics for elementary and middle school teachers. Topics include: the nature and history of mathematics; mathematical thinking and processes; and problem solving strategies and skills. (*Prerequisites:* Math 160A and 160B or equivalent) (3-0)

ED-E 438B (1½) COMPUTER APPLICATIONS IN THE INSTRUCTION OF SECONDARY MATHEMATICS
A study of the instructional uses of the microcomputer in the teaching and learning of mathematics in the secondary school. The emphasis is on computer programs and programming activities which allow the student to investigate concepts and solve problems in mathematics. Commerical software designed for use in computer assisted instruction will also be examined and evaluated. (*Prerequisites:* 6 units of university level mathematics and computer experience satisfactory to the instructor or completion of an introductory module) (2-2)

ED-E 443 (1½) MATHEMATICS CURRICULUM IN THE ELEMENTARY SCHOOL
Goals of mathematics teaching and learning; examination of programs, instructional materials, teaching strategies, classroom settings and evaluation procedures; current trends and issues. (*Prerequisite:* Professional year) (3-0)

ED-E 444 (1½) MATHEMATICS INSTRUCTION IN THE ELEMENTARY SCHOOL
Teaching strategies; classroom organization; learning activities and settings; evaluation procedures; instructional materials, their function and use. (*Prerequisite:* Professional year) (3-0)

ED-E 484 (1½) DIAGNOSIS AND INTERVENTION IN MATHEMATICS
Identification of strengths and weaknesses; interview strategies, procedures and settings; interpretation of error patterns; intervention objectives and strategies. (*Prerequisite:* Professional year) (3-0)

ED-E 743 (2) CURRICULUM AND INSTRUCTION IN MATHEMATICS IN THE ELEMENTARY SCHOOL
An examination of the mathematics curriculum and instructional procedures for teaching mathematics; scope and sequence, objectives, classroom settings, teaching strategies, manipulative aids, learning activities, and evaluation procedures. (*Prerequisite:* Acceptance in a professional year) (1-2)

ED-E 761 (3-4½) CURRICULUM, INSTRUCTION AND PRACTICUM IN SECONDARY SCHOOL SUBJECTS — MATHEMATICS
Open to students who have completed the prescribed teaching area or who have special permission of the Education Advising Centre. Students will be denied the practicum experience (fall or spring) if their preparatory work is considered unsatisfactory by the Dean.
(Grading: INC; letter grade; INP)

SCIENCE EDUCATION

Dr. G. Snively, Elementary Adviser
Professor J. Sheppy, Secondary Adviser

ED-E 145A (1½) PHYSICAL SCIENCE
Topics from physics as applied in the elementary school science curriculum; focus is on general understanding of principles and concepts. (Not required for students who have taken Physics 11 or higher within the last ten years) (2-2)

ED-E 145B (1½) EARTH SCIENCE
Topics from astronomy, geology, meterology and oceanography as applied in the elementary school science curriculum; focus is on general understanding of principles and concepts. (Not required for students who have taken Earth Science 11 or Geology 12 or higher within the last ten years) (2-2)

ED-E 145C (1½) BIOLOGICAL SCIENCE
Topics from biology and ecology as applied in the elementary school science curriculum; focus is on general understanding of principles and concepts. (One of PE 141, 241A, or 241B is acceptable in lieu of 145C on the elementary degree program.) (Not required for students who have taken Biology 11 or higher within the last ten years) (2-2)

ED-E 345A (formerly half of 345) (1½) SELECTED TOPICS IN GENERAL SCIENCE
Topics selected from astronomy, biology, chemistry, geology, physics, and the nature and history of science will be studied. Topics will be selected for their relevance to elementary science education. (*Prerequisite:* two of 145A, B or C or their equivalents) (2-2)

ED-E 345B (formerly half of 345) (1½) SCIENCE-TECHNOLOGY-SOCIETY ISSUES IN SCIENCE EDUCATION
The interplay of science, technology and society with special reference to the Canadian context. The influence of such issues on elementary and secondary science curricula. Consideration of instructional approaches to issues in school science. Canadian contributions to the growth of science will be studied. (2-2)

ED-E 373 (1½) ENVIRONMENTAL EDUCATION
An introductory course which will focus on the major ecosystems in British Columbia. The course will lend itself to a multidisciplinary approach and should be of interest to teachers of all subjects and grade levels. Topics will include: man's impact on the ecosystem; goals for environmental and outdoor education; current issues and trends; teaching strategies; program and curriculum development and evaluation. Selected fieldtrips to a variety of locations in B.C. (Not available for credit to students who have already completed 374) (2-2)

ED-E 438C (1½) COMPUTER APPLICATIONS IN THE INSTRUCTION OF SECONDARY SCIENCE
A study of the instructional uses of the microcomputer as a tool in the teaching of science. Consideration is given to the learning that may be achieved through teacher and student use of the computer and application packages. Topics include: impact of the computer on science education; computer assisted learning; data collection and control of experiments; problem solving; simulations; and classroom evaluation. (*Prerequisites:* Computer experience satisfactory to the instructor or completion of an introductory module) (2-2)

ED-E 445A (formerly half of 445) (1½) SCIENCE INSTRUCTION IN THE ELEMENTARY SCHOOL
Topics considered will include inquiry teaching, children's science learning, compatibility of teaching strategies and learning styles, teaching thinking skills in science, and research on science instruction. (*Prerequisite:* Professional year) (3-0)

ED-E 445B (formerly half of 445) (1½) CONTEMPORARY ISSUES IN ELEMENTARY SCIENCE CURRICULA
Topics considered will include goals for science teaching, societal influences, current curricula, modifying existing curricula, future trends, evaluation of science learning, and implementing curricular changes. (*Prerequisite:* Professional year) (3-0)

ED-E 745 (2) CURRICULUM AND INSTRUCTION IN ELEMENTARY SCIENCE
A study of the curriculum organization and techniques of instruction in elementary science. The course will include consideration of both the content and strategies for teaching elementary health education. (*Prerequisite:* Acceptance in a professional year) (1-2)

ED-E 769 (3-4½) CURRICULUM, INSTRUCTION AND PRACTICUM IN SECONDARY SCHOOL SUBJECTS — SCIENCE
Open to students who have completed the prescribed teaching area or who have special permission of the Education Advising Centre. Students will be denied the practicum experience (fall or spring) if their preparatory work is considered unsatisfactory by the Dean. (Students with teaching areas in biology, chemistry, physics, or general science will enroll in this course.) (Grading: INC; letter grade; INP)

SOCIAL STUDIES EDUCATION

Dr. T. Riecken, Elementary Adviser
Dr. P. Thomas, Secondary Adviser

ED-E 346 (1½ formerly 3) SOCIAL STUDIES IN THE ELEMENTARY SCHOOL
A study of the concepts, processes and their development within contemporary curricula for elementary school social studies. An interdisciplinary social studies exploration of the central themes will consider the family, the community, the interactions of families, communities and environment, the cultures, and the ethnic composite of Canada. (3-0)

ED-E 446 (1½) (formerly half of 346) APPROACHES IN TEACHING THE SOCIAL STUDIES CURRICULUM (1-7)
Research trends, learning approaches and instructional strategies will be examined in depth as they apply to the Social Studies curriculum. (*Prerequisite:* Professional year or permission of instructor) (3-0)

ED-E 746 (1½) CURRICULUM AND INSTRUCTION IN ELEMENTARY SOCIAL STUDIES
A study of the curriculum organization and techniques of instruction in elementary social studies. Examples are drawn from a variety of content areas: history, geography, anthropology, sociology, political science, economics and community services including health. (*Prerequisite:* Acceptance in a professional year) (2-0)

ED-E 755 (3-4½) CURRICULUM, INSTRUCTION AND PRACTICUM IN SECONDARY SCHOOL SUBJECTS — GEOGRAPHY
Open to students who have completed the prescribed teaching area or who have special permission of the Education Advising Centre. Students will be denied the practicum experience (fall or spring) if their preparatory work is considered unsatisfactory by the Dean.
(Grading: INC; letter grade; INP)

ED-E 758 (3-4½) CURRICULUM, INSTRUCTION AND PRACTICUM IN SECONDARY SCHOOL SUBJECTS — HISTORY
Open to students who have completed the prescribed teaching area or who have special permission of the Education Advising Centre. Students will be denied the practicum experience (fall or spring) if their preparatory work is considered unsatisfactory by the Dean.
(Grading: INC; letter grade; INP)

SPECIAL STUDIES

Contact individual professors or Department Chair for information.

ED-E 438A (1½) COMPUTER APPLICATIONS IN THE INSTRUCTION OF ELEMENTARY SCHOOL MATHEMATICS, SCIENCE AND SOCIAL STUDIES
Advanced study of specific instructional applications of the microcomputer to the teaching and learning of elementary school mathematics, science and social studies. Consideration is given to whole class, small group and individual use of microcomputers and appropriate software. Topics include: Logo, problem solving, graphing, time lines, direct data storage and retrieval, report writing, mapping and data banks. Emphasis will be given to advanced uses of the microcomputer other than drill and practice. (*Prerequisite:* Professional Year and basic familiarity with microcomputers or completion of ED-D 338) (2-2)

ED-E 447 (1½) MATHEMATICS, SCIENCE AND SOCIAL STUDIES IN EARLY CHILDHOOD EDUCATION
A survey of mathematics, science and social studies content, materials, methods suitable for children from ages three to six. (*Prerequisite:* ED-B 440 or consent of instructor; professional year) (3-0)

ED-E 480 (1½ or 3) CONTEMPORARY ISSUES IN EDUCATION — SOCIAL AND NATURAL SCIENCES
Current topics and developments in education, with particular consideration of their relevance to the schools of British Columbia. This will be taught from an interdisciplinary approach. (With permission of the Education Advising Centre may be taken more than once for credit on a degree program) (3-0)

ED-E 487 (1½ or 3) SPECIAL TOPICS IN EDUCATION — SOCIAL AND NATURAL SCIENCES
Topics of current interest or concern to groups of students. (With permission of the Education Advising Centre may be taken more than once for credit on a degree program) (3-0)

ED-E 494 (1½) DIRECTED STUDIES
Research projects, directed reading, or additional course work in a specified area. (All students must obtain written approval from the Education Advising Centre before registering. Permission will not normally be given for more than three units of directed studies.)

494M Teaching of Geography
494N Teaching of History
494P Social Studies
494R Mathematics Education
494U Outdoor Education
494X Science Education

ED-E 495 (1½) DIRECTED STUDIES
(Description as for 494)

ED-E 499 (½-3) PROFESSIONAL DEVELOPMENT — SOCIAL AND NATURAL SCIENCES
(This is a variable content course directed at improving specific teacher and/or administrator competencies. It will normally be offered off campus. Not more than 3 units of credit for any 499 courses may be approved as electives on an education degree program. Approval must be obtained from the Education Advising Centre.)
(Grading: COM, N or F)

DIVISION OF PROFESSIONAL STUDIES

All courses which have a practicum component are governed by the "Regulations Concerning Practica", page 155 of this calendar. No course containing school experience practica may be challenged. Students are directed to the section, "School Experience, Student Teaching and Seminars" on page 156 of this calendar. Further, students who wish to repeat any ED-P course with a practicum must appeal to the Faculty Admissions and Adjudication Committee for permission.

SCHOOL EXPERIENCE

ED-P 197 (1½) FIRST YEAR ELEMENTARY SEMINAR AND SCHOOL EXPERIENCE
This course deals with communication skills and interpersonal relations in teaching. Seminars will be held twice weekly in the First or Second Term. Normally students will be required to have a two week school experience following examinations in April. Transfer students taking

197 and 297 in the same academic year must complete ten weekly half day experiences in the schools in the fall as well as meeting the 297 school experience requirements in the spring.
(Grading: INC; COM, N or F.)

ED-P 297 (1½) PREPROFESSIONAL YEAR ELEMENTARY SEMINAR AND SCHOOL EXPERIENCE
Weekly seminars dealing with formal analysis of teaching and acquisition of selected teaching skills, plus a minimum of 20 hours of microteaching. Skills are applied during school experience activities. A two week post session practicum following final examinations is required. (*Prerequisite:* 197 or permission of the Division of Professional Studies. Authorization to register in the Faculty of Education or permission of the Education Advising Centre) (Grading: INC; COM, N or F.)

ED-P 397 (1½ or 3) SPECIAL PREPROFESSIONAL YEAR ELEMENTARY SEMINAR AND SCHOOL EXPERIENCE
A seminar to be conducted prior to the professional year that will deal with the examination and acquisition of skills specific to the needs of special situations. The course will include experiences in the special setting. (Grading: INC; COM, N or F.)

ED-P 398 (1½) THIRD YEAR SECONDARY SEMINAR AND SCHOOL EXPERIENCE
A program of regularly scheduled seminars in which students will receive some instruction in methodology as preparation for visits to secondary school classrooms. Students must complete ten weekly half day experiences in the schools. A two week post session practicum may be required. This requirement may be modified for students on special programs.
(Grading: INC; COM, N or F)

ED-P 498 (1½) FOURTH YEAR SECONDARY SEMINAR
A program of seminars and school experiences prerequisite to the secondary methodology courses. A two week post session practicum following final examinations is required. This requirement may be modified for students on special programs. (*Prerequisites:* 398 or permission of the Division; and authorization to register in the Faculty of Education or permission of the Education Advising Centre)
(Grading: INC; COM, N, or F)

ED-P 797 (3) SEMINAR AND ELEMENTARY STUDENT TEACHING
For students registered in the professional year, elementary program. Consists of a weekly seminar and school experience to be arranged by the School Experience Office. Initial school experiences will occur during the first week of the term. Students will be denied the practicum experience (fall or spring) if their preparatory work is considered unsatisfactory by the Dean. (Grading: INC; letter grade; INP)

PROFESSIONAL COURSES

ED-P 496 (1½) SUPERVISION OF TEACHING
An exploration of supervisory models and techniques for supervising teaching. This course is for certificated teachers and includes three weeks of practicum experience. (*Prerequisite:* Valid teaching certificate, 3 years experience and permission of Division)

ED-P 497 (1½ or 3) PROFESSIONAL SEMINAR OR PRACTICUM 3.5 or 6.5 fee units
A seminar or supervised practicum for persons wishing to update teaching skills and to gain or validate teaching certificates. Practicum only students will be on an individualized study/practice program. (*Prerequisite:* Consent of the Education Advising Centre)
(Grading: INC, COM, N or F)

ED-P 777 (1½) INTRODUCTION TO TEACHING METHODS
General introduction to curriculum and instruction in secondary school subjects. (Offered to internship students only.)
(Grading: INC; COM, N or F)

ED-P 789 (6) INTEGRATED PROGRAM IN ELEMENTARY CURRICULUM AND METHODOLOGY
An integrated program in current curriculum developments and methods of instruction for elementary teachers who wish to update their professional training or for experienced secondary teachers who are considering teaching at the elementary level. Credit towards a degree may be used only for updating of professional training completed more than ten years previously. Credit for this course cannot be used for elective credit on a current degree program. (*Prerequisite:* Consent of the Education Advising Centre). (Lectures and laboratories: hours to be arranged; normally offered in Summer Studies only)
(Grading: INC; COM, N or F)

ED-P 790 (1½) TEACHING SKILLS SEMINAR: SECONDARY
The study, performance and evaluation of teaching skills essential to teacher performance at the secondary level. Skills will be practised and evaluated through peer interaction. (*Prerequisite:* Acceptance in the Secondary Post Degree Professional Program)
(Grading: INC; COM, N or F)
(3-0)

ED-P 792 (½) SECONDARY CAREER SEMINAR
Forum for discussion on teaching and general class management. (*Prerequisite:* Acceptance in a professional year)
(Grading: INC; COM, N or F)
(1-0)

ED-P 793 (1½) INTERNSHIP SEMINAR
Seminar on teaching competencies. Topics will include teaching skills, classroom management, relationship of theory to practice, analysis of teaching, the teacher as a professional, and education community orientation. (*Prerequisite:* Acceptance in a professional year)
(Grading: INC; COM, N or F)
(1-0)

ED-P 799A (9) INTEGRATED PROFESSIONAL PROGRAM (Regular)
Historical and Social Foundations; Administration and Management of Education in B.C.; Measurement and Evaluation; Learning Resources; Reading in the Secondary Schools; Career Seminar. (*Prerequisite:* Acceptance in a professional year) (Grading: INC; letter grade)
(18-0) or (9-0; 9-0)

ED-P 799B (12) INTEGRATED PROFESSIONAL PROGRAM (Post-Degree Professional Program)
Historical and Social Foundations; Administration and Management of Education in B.C.; Psychology of Classroom Learning; Psychology of Adolescence; Measurement and Evaluation; Media Education; Library Education; Directed Media or Library Project. (*Prerequisite:* Acceptance in a professional year) (Grading: INC; letter grade)
(24-0 first term; practicum second term)

SPECIAL STUDIES

Contact the Division Director for information.

ED-P 494 (1½) DIRECTED STUDIES 3.5 fee units
Research projects, directed reading, or additional course work in a specified area. (All students must obtain written approval from the Education Advising Centre before registering. Permission will not normally be given for more than three units of directed studies.)

494Y Student Teaching

ED-P 495 (1½) DIRECTED STUDIES
(Description as for 494)

ED-P 499 (½-3) PROFESSIONAL DEVELOPMENT — PROFESSIONAL STUDIES
This is a variable content course directed at improving specific teacher and/or administrator competencies. It will normally be offered off campus. Not more than 3 units of credit for any 499 courses may be approved as electives on an education degree program. Approval must be obtained from the Education Advising Centre.
(Grading: COM, N, or F)

FACULTY OF ENGINEERING

Eric G. Manning, B.Sc., M.Sc. (Wat.), Ph.D. (Ill.), F.I.E.E.E., P.Eng., Dean of the Faculty
Byron L. Ehle, A.B. (Whitman), M.S. (Stan.), Ph.D. (Wat.), Associate Dean
Barry W. Brooks, B.Sc., M.Sc. (Calg.), P. Eng., Program Manager and Assistant to the Dean
George Csanyi-Fritz, P.Eng., Faculty Engineer
Gary F. Duncan, B.Sc. (U. of Vic.), M.Sc. (Tor.), Senior Programmer Analyst
Susan Fiddler, B.Mus. (U. of Vic.), Cooperative Education Program Assistant
Marilyn A. Kowalchuk, B.Sc., B.Sc.Eng. (Man.), Cooperative Education Coordinator
Audrey L. McFarlane, B.Sc. (Man.), P.Eng., Cooperative Education Coordinator
Ian Main, B.A.Sc. (Wat.), Cooperative Education Coordinator
Andrea Toth, B.A. (Tor.), M.Sc. (Flor. Internat.), Cooperative Education Program Assistant

UNDERGRADUATE PROGRAMS

The Faculty of Engineering offers B.Eng. degrees in Electrical Engineering, Computer Engineering and Mechanical Engineering, and a B.Sc. degree in Computer Science.

Admission requirements and regulations are different for the B.Eng. and the B.Sc. degree programs and are described separately below. The Cooperative Education Program is mandatory for the B.Eng. degree programs, but is optional for the B.Sc. degree program. The Cooperative Education Programs are described separately below.

BACHELOR OF ENGINEERING

APPLICATION FOR ADMISSION

The normal procedure is to admit students into the B.Eng. degree program to commence First Year Engineering in the September-December term each year.

Application forms for undergraduate admission to the B.Eng. degree program are available from Admission Services. Completed applications must be submitted to Admission Services not later than May 31. Applicants will receive written acknowledgement that their application for admission to the B.Eng. degree program has been received by Admission Services and confirmation that their admission file is complete.

INTERNATIONAL STUDENTS

The university has a primary obligation to permanent residents of Canada. Nevertheless, a limited number of international students may be admitted to the B.Eng. degree program.

RESTRICTIONS ON ADMISSION

There are restrictions on the number of students that can be admitted to First Year Engineering and to first and second years of the B.Eng. degree program. Achievement of the minimum academic requirements may not provide assurance of admission.

REQUIREMENTS FOR ADMISSION

Applicants for the B.Eng. degree program must meet the University of Victoria admission requirements as given under the heading General Information on pages 7-12. Additional admission requirements are given below.

Graduates of senior secondary schools in British Columbia require:

1) A grade of not less than B in Mathematics 12 (or Algebra 12) and Physics 12, and
2) Chemistry 11 or Chemistry 12.

Graduates of senior secondary schools in Canadian provinces other than British Columbia require equivalent qualifications in algebra, physics and chemistry to those specified above and are advised to contact Admission Services for further information on recognition of their secondary school performance.

Applicants who have completed First Year Science at a university or college are eligible to be considered for admission.

A limited number of mature applicants may be admitted notwithstanding the fact that they might not meet the minimum requirements for admission if, in the judgment of the Faculty, compensatory experience has been obtained.

READMISSION AFTER VOLUNTARY WITHDRAWAL

Students who have withdrawn voluntarily from the B.Eng. degree program and later reapply for admission must do so by the prescribed deadlines and will be considered in competition with all other applicants.

TRANSFER CREDIT

The Faculty of Engineering may grant credit to applicants to the B.Eng. degree program for courses taken at other postsecondary educational institutions. Credit will be considered only for those courses that are equivalent to courses in the B.Eng. degree program and in which satisfactory performance has been achieved. For courses with prefixes ENGR, ELEC, CENG and MECH, detailed documentation supporting the credit request may be required.

To be considered for admission, transfer students must have a minimum overall grade point average (GPA) of 2.50 on a 4.00 scale. Admission will be to either First Year or Second Year, depending on the extent of transfer credit granted.

REGULATIONS ON ACADEMIC PERFORMANCE

1. Grading

The grading scheme used for the B.Eng. degree program is the same as that found under the heading General Information except for a somewhat different interpretation of the C, D and DEF grades.

A grade of C in a course implies that a satisfactory performance has been achieved.

A grade of D in a course implies that a weak but marginally acceptable performance has been achieved. While a D grade is a pass grade, an accumulation of D grades during a review period may lead to Probationary or Failed Standing.

Grade DEF is used for courses in which a deferred examination has been granted on the basis of illness, family affliction or other similar circumstances. Please consult Section 5 of these regulations for B.Eng. degree program courses and the general University regulations on page 16 for nonengineering courses.

2. Review of an Assigned Grade in Engineering Courses

a) Any request for a review of a final grade must normally reach the Dean's office within 21 days after the release of assigned grades by the Dean's office.
b) The review of a final grade shall be restricted to grade components contributed by a final examination, and to any other grade components released to the student within the last 21 days before the end of classes.

3. Academic Terms and Academic Years

The schedule for the B.Eng. degree program consists of eight academic terms (two per academic year) and six work terms.

The academic terms are scheduled from September to December (F), January to April (S), and May to August (K).

The timetable for academic terms and work terms is shown in Table I. The courses scheduled for each academic term appear under the heading ACADEMIC SCHEDULE associated with each Department.

Any deviations from this schedule require the written approval of the Dean of the Faculty.

TABLE I

Year	September-December	January-April	May-August
1	Academic Term 1A	Academic Term 1B	Work Term W1

2	Academic Term 2A	Work Term W2	Academic Term 2B
3	Work Term W3	Academic Term 3A	Work Term W4
4	Academic Term 3B	Work Term W5	Academic Term 4A
5	Work Term W6	Academic Term 4B	

4. Review of Academic Performance

The following regulations are in terms of grades in single term courses offered in the September-December, January-April or May-August term.

The academic standing of each student registered in the B.Eng. degree program will be reviewed annually following the January-April term. Students will receive Satisfactory Standing, Probationary Standing or Failed Standing if they registered in at least four courses during the period under review.

Student performance is assessed on the basis of the grade point average and the number of grades of C or better accumulated over the review period.

The grade point average is calculated by adding the grade point values of all the grades awarded during the period under review and dividing the sum by the total number of grades. DEF grades will be excluded from the calculation. Grades obtained in supplemental examinations will be treated as additional grades in the recalculation of the grade point average.

The specific regulations for the B.Eng. degree program are as follows:

a) Upon completion of an academic term in which the student registered for not less than four courses for the first time, that student may register for six courses in the following academic term, provided that a grade of C or better was achieved in each of at least two thirds of the courses taken by the student. The required minimum number of courses having grades of C or better is given in Table II.
Students who do not satisfy the above requirements will have their program determined by the Dean of Engineering.

b) Student standings are defined as follows:
Satisfactory Standing
A grade point average of not less than 2.00 and a grade of C or better in each of at least two thirds of the courses taken by the student during the period under review with no more than one uncleared failing grade. The required minimum number of courses with grades of C or better is given in Table II.
Probationary Standing
A grade of C or better in each of at least one half of the courses taken by the student during the period under review with no more than two uncleared failing grades. The required minimum number of courses with grades of C or better is given in Table III.
Failed Standing
Failure to meet the criteria for Satisfactory or Probationary Standing or two consecutive assessments of Probationary Standing.

c) Students with Satisfactory Standing may proceed in the program and must attempt to clear any uncleared failing grade during the next reviewing period.

d) Students with Probationary Standing may remain in the program for a period of up to one year subject to the following conditions:
i) They must repeat all courses for which D grades were obtained during the period under review.
ii) They must not register for more than six courses per term.
iii) They must achieve Satisfactory Standing at the time of the next review.

e) Students with Failed Standing will be required to withdraw from the Faculty and will not be considered for readmission to the Faculty for at least one year. An application for readmission from a student who has previously been required to withdraw will be considered in open competition with other applicants for admission. On readmission, credit will not be granted for courses taken with grades of D during the review period immediately prior to withdrawal, and Satisfactory Standing must be achieved at the next review.

TABLE II

Minimum Requirements for Satisfactory Standing in the Faculty

Number of Courses	4	5	6	7	8	9	10	11	12	13
Minimum Number of Grades of C or Better	3	4	4	5	6	6	7	8	8	9

Maximum Number of Uncleared Failing Grades: 1

TABLE III

Minimum Requirements for Probationary Standing in the Faculty

Number of Courses	4	5	6	7	8	9	10	11	12	13
Minimum Number of Grades of C or Better	2	3	3	4	4	5	5	6	6	7

Maximum Number of Uncleared Failing Grades: 2

5. Deferred Examinations

a) Where a student has been unable to write an examination owing to illness, family affliction or other similar circumstances, the Faculty may authorize the writing of a deferred examination.

b) For the purpose of providing evidence to the Faculty as to the nature of illness and its effect on the student's ability to write an examination, the physician's medical report should be made on a form provided by the Faculty of Engineering, where possible. If this form is not used, the medical report should contain the information required by the Faculty of Engineering.

6. Supplemental Examinations

a) At the discretion of the Dean of Engineering, supplemental examination privileges in B.Eng. degree courses may be granted to students who would have achieved either Satisfactory or Probationary Standing, as defined in Section 4, during their academic work subsequent to the last academic review. The number of such examinations may not exceed one third of the courses taken by the student since the last review.

b) Students may apply to write a supplemental examination in a course only if they have written a final examination and have received a final failing grade in the course.

c) The grade of the supplemental examination shall replace only the grades of examinations and quizzes, and shall not compensate for or replace laboratory, project and assignment grades. A passing grade obtained as a result of completing a supplemental examination will be shown on the student's academic record with a grade point value of 1, corresponding to a D, and will be included as such in the calculation of the grade point average for review of academic performance at the University. However, for the purpose of academic review in the Faculty, the actual grade resulting from the completion of a supplemental will be used.

d) A student who has failed to pass a specific course after a supplemental examination must repeat the course or replace it by an alternative course approved by the Dean of Engineering.

e) Applications for supplemental examination, accompanied by the necessary fees, must be received by the Dean's Office by the following dates:
1) For courses taken during the September-December term: February 15
2) For courses taken during the January-April term: June 15
3) For courses taken during the May-August term: October 15

f) Supplemental examinations are scheduled by the Faculty.

7. Equivalent Courses

Approval may be given, at the discretion of the Dean, for a student to replace one or more B.Eng. degree program courses by other acceptable courses. Written approval must be obtained in advance. Normally, such replacement courses will be taken at the University of Victoria.

An F grade in any course taken outside of the Faculty of Engineering may be cleared by passing another acceptable course, subject to the written approval of the Dean of Engineering.

8. Withdrawal from Courses

Students will not be permitted to withdraw from a given course more than once.

9. Graduation Requirements

Students are deemed to have satisfied the graduation requirements if:

a) They have completed successfully the full set of courses specified for the particular degree program with Satisfactory Standing, and

b) they have completed successfully the requirements of the Engineering Cooperative Education Program.

10. Degrees with First Class Distinction

Students who obtain a grade point average of not less than 7.00 over the last two years of their program and have no failing grades and not more than two D grades over the last two years of their program will receive the B.Eng. degree with First Class distinction.

11. Dean's List

Students who complete their graduation requirements with First Class distinction shall be included in the Dean's Graduation List.

12. Special Provisions

Notwithstanding the above regulations, the Faculty shall exercise an equitable discretion in all cases so as to achieve fairness in the application of academic regulations.

ENGINEERING COOPERATIVE EDUCATION PROGRAM

Cooperative Education is mandatory in the B.Eng. degree program and, consequently, forms an integral part of the academic requirements for a B.Eng. degree. There are six work terms offered, according to the schedule shown in Table I under the heading Academic Terms and Academic Years.

The following regulations apply to the program:

1. The first work term (W1) is optional.
2. Each student will normally be required to complete the five work terms W2, W3, W4, W5 and W6 with a passing grade in order to continue in the subsequent academic term and in order to graduate. Under exceptional circumstances, a student may be permitted to graduate having completed only four work terms.
3. The work term performance of each student will be assessed. A grade of COM, F or N will be assigned; COM is the passing grade.
4. Students who transfer into the B.Eng. degree program with not less than 12 units of academic credit may apply for transfer credit of work terms that have been successfully completed while registered in another postsecondary institution.

The Engineering Cooperative Education Coordinators are responsible for work placements, the evaluation of work term performance, and for the assignment of the work term grade.

The general regulations found in the Cooperative Education Programs section of the calendar also apply to B.Eng. degree program students. Where the Engineering regulations differ from the Cooperative Education regulations, the Engineering regulations shall apply.

REQUIREMENTS COMMON TO ALL BACHELOR OF ENGINEERING PROGRAMS

Engineering Core

CHEM 150	Engineering Chemistry
C SC 110	Computer Programming: I
C SC 160	Computer Programming: II: For Engineers
C SC 349A	Numerical Analysis: I
ELEC 216	Fundamentals of Electrical Engineering
ELEC 250	Linear Circuits: I
ENGR 150	Engineering Graphics
ENGR 240	Technical Writing
ENGR 280	Engineering Economics
ENGR 446	Technical Report
ENGR 447*	Technology and the Individual
ENGR 497	Technology and Society
ENGR 498	Engineering Law
ENGL 115	College Composition
MATH 100	Calculus: I
MATH 101	Calculus: II
MATH 133	Matrix Algebra for Engineers
MATH 200	Calculus of Several Variables
MATH 201	Introduction to Differential Equations
STAT 254	Probability and Statistics for Engineers
PHYS 120	Mechanics: I
PHYS 125	Fundamentals of Physics

* May be replaced by courses in humanities, social sciences, arts, management, engineering economics or communications at a challenging level, as required by CEAB guidelines for complementary studies, and as approved by the Faculty of Engineering's Undergraduate Studies Committee.

BACHELOR OF SCIENCE

ADMISSION

The Faculty of Engineering also offers Major and Honours programs in Computer Science leading to the B.Sc. degree.

Students who plan to pursue a program in Computer Science should apply to the Admissions Office of the University and should register in the Faculty of Arts and Science for the first year of their program.

Admission to the Major or Honours program in Computer Science may be granted only after completion of at least one year of studies in the Faculty of Arts and Science or equivalent studies and is subject to the requirements given in the Departmental entry below.

Application for admission to the Major or Honours program in Computer Science should be made no later than the beginning of the student's third year of studies. Once admitted to the Major or Honours Degree programs in Computer Science, students register in the Faculty of Engineering. Students pursuing a General Degree program in Computer Science or a Combined Computer Science/Mathematics degree program remain registered in the Faculty of Arts and Science.

ACADEMIC ADVICE

Students considering or enrolled in a General Computer Science or Combined Computer Science/Mathematics degree program should seek academic advice from the Arts and Science Advising Centre or the Department of Computer Science. Students considering or enrolled in a Major or Honours Degree program in Computer Science should seek academic advice through the Computer Science Cooperative Education/Advising Office.

DEGREE REQUIREMENTS

Each candidate for the B.Sc. Major or Honours degree is required:

(a) to have satisfied the University English requirement;
(b) to include in the first 15 units presented for the degree not more than 9 units in Computer Science and at least 3 units from each of two other departments within the Faculties of Engineering or Arts and Science;
(c) to include in the next 15 units presented for the degree at least 3 units from a department in the Faculties of Engineering or Arts and Science other than Computer Science;
(d) to include in the remaining units presented for the degree at least 21 units of courses numbered at the 300 or 400 level (this is a general University regulation);
(e) to satisfy the requirements of the Major or the Honours program in Computer Science as specified in the Department of Computer Science entry below;
(f) to present credit in a minimum of 60 units of university level courses numbered 100 and above; at least 30 of these 60 units must normally be completed at this University;
(g) to present no more than 6 units of free electives chosen without restriction from among all undergraduate course at this University (excluding Physical Education activity courses and School Experience or Practicum courses).

Additional regulations regarding the B.Sc. Honours program are located in the Department of Computer Science entry.

CREDIT FOR COURSES OFFERED BY OTHER FACULTIES

All courses offered by the Faculty of Arts and Science are recognized for credit for Major and Honours programs in Computer Science. In addition, courses offered by the Faculty of Fine Arts which are acceptable for credit in the Faculty of Arts and Science are acceptable for Major and Honours programs in Computer Science.

INTERFACULTY PROGRAMS

Students may arrange for an Interfaculty Double Honours or Major program through the Computer Science Coop/Advising Office. Such

programs involve satisfying the Honours or Major requirements of two disciplines in two different Faculties. Agreement to details of all such programs must be signed by the student and by representatives of the academic units involved. Students undertaking an interfaculty program will be subject to the regulations of the Faculty in which they are registered.

Only one B.Sc. degree with a Double Major or a Double Honours or a Joint Major/Honours will be awarded on the recommendation of the Faculty in which the student is registered.

Students in a Major or Honours Program may also arrange to undertake a Minor in the Faculty of Arts and Science (see Minor, page 36).

COOPERATIVE EDUCATION PROGRAM

Please refer to page 32 of this calendar for a general description of Cooperative Education. Details of the Computer Science Cooperative Education program are given in the Department's entry.

CREDIT FOR STUDIES ELSEWHERE

Credit for work transferred from another institution is subject to the regulations on pages 10 and 15 of this calendar.

Students already enrolled in a B.Sc. degree program who plan to undertake work at other universities must receive prior written approval from the Department of Computer Science if they wish such courses to be credited towards the B.Sc. degree.

Students authorized to attend another university who accept a degree from that institution abrogate the right to a University of Victoria degree until they have satisfied the University's requirements for a second bachelor's degree (see page 20).

GRADUATION STANDING

The graduation standing for students in a B.Sc. Major degree program is determined in accordance with the University regulations on page 20. The graduation standing for students in a B.Sc. Honours degree program is determined in accordance with the regulations given below in the Department of Computer Science entry.

REGULATIONS ON ACADEMIC PERFORMANCE

Students in the B.Sc. degree program are subject to the University regulations on academic performance as stated in the academic regulations found on pages 15-20 of this calendar.

DEPARTMENT OF COMPUTER SCIENCE

D. Michael Miller, B.Sc. (Winn.), M.Sc., Ph.D. (Man.), Professor and Chair of the Department
R. Nigel Horspool, B.A. (Cantab.), M.Sc., Ph.D. (Tor.), Professor
Jon C. Muzio, B.Sc., Ph.D. (Nott.), Professor
D. Dale Olesky, B.Sc., M.Sc. (Alta.), Ph.D. (Tor.), Professor
Frank Ruskey, B.A., M.A., Ph.D. (Calif., San Diego), Professor
Maarten van Emden, M.Sc. (Technische Hogeschool), Ph.D. (Amsterdam), Professor
Byron L. Ehle, A.B. (Whitman), M.S. (Stan.), Ph.D. (Wat.), Associate Professor
Michael R. Fellows, B.A. (Sonoma St.), M.A., Ph.D. (Calif. - San Diego), Associate Professor
Michael R. Levy, B.Sc., M.Sc., (Witw.), Ph.D. (Wat.), Associate Professor
Frank D.K. Roberts, M.A. (Cantab.), M.Sc., Ph.D. (Liv.), Associate Professor
William W. Wadge, B.A. (Brit. Col.), Ph.D. (Calif.-Berk.), Associate Professor
Mantis H.M. Cheng, B.Math., M.Math., Ph.D. (Wat.), Assistant Professor
John A. Ellis, B.Sc., M.Sc. (Lond.), M.S. (Ill. Inst. of Tech.), Ph.D. (Northw.), Assistant Professor
Daniel M. Hoffman, B.A. (S.U.N.Y.), M.S., Ph.D. (N. Car., Chapel Hill), Assistant Professor
Hans A. Müller, M.S., Ph.D. (Rice), Assistant Professor
Wendy J. Myrvold, B.Sc. (McG.), M.Math., Ph.D. (Wat.), Assistant Professor
Micaela Serra, B.Sc. (Man.), M.Sc., Ph.D. (U. of Vic.), Assistant Professor
Gholamali C. Shoja, B.S.E.E. (Kan. St.), M.S.E.E. (Northw.), D. Phil. (Sus.), Assistant Professor
Glen C. Darling. B.Sc. (U. of Vic.), Senior Laboratory Instructor
Marilee V. Garrett, B.A. (Brown), M.Sc. (U. of Vic.), Cooperative Education Coordinator (Computer Science and Mathematics)
E. Alan Idler, B.Sc. (Brit. Col.), M.Sc. (U. of Vic.), Senior Scientific Assistant
Megan Jameson, B.A. (U. of Vic.), Program Assistant, Cooperative Education Program
William Kastelic, B.Sc., M.Sc. (S. Fraser), Programmer Analyst
J. Donald Large, C.D., Administrative Officer

Visiting, Adjunct and Cross-listed Appointments:

Ian Barrodale, B.Sc. (Wales), M.A. (Brit. Col.), Ph.D. (Liv.), Adjunct Professor (1990-92)
Albert G. Buckley, B.Sc. (Calg.), M.Sc. (Alta.), Ph.D. (Brit. Col.), Adjunct Professor (1989-91)
Maurice Danard, B.A. (Brit. Col.), M.A. (Tor.), Ph.D. (Chic.), Adjunct Professor (1990-92)
Liwu Li, M.Sc. (Conc.) Ph.D. (Alta.), Visiting Assistant Professor (1990-91)
Dominique Roelants Van Baronaigien, B.Sc., M.Sc., Ph.D. (U. of Vic.), Visiting Assistant Professor (1990-91)

PROGRAMS

The Department of Computer Science offers programs of study leading to the following degrees:

- Faculty of Engineering: B.Sc. Major or Honours in Computer Science;
- Faculty of Arts and Science: B.Sc. Major or Honours in Combined Computer Science and Mathematics; B.A. or B.Sc. General Degree in Computer Science;
- Faculty of Graduate Studies: M.A., M.Sc., Ph.D.
  For details of graduate programs in Computer Science, see page 244.

LIMITATION OF ENROLLMENT

Students are advised that, because of limited facilities and staff it may be necessary to limit enrollment in certain Computer Science courses. Enrollment in Computer Science 100, 110, 112, 115 and 200 will be on a first come, first served basis. Enrollment limits in all other courses will be imposed where necessary on the basis of the facilities available and academic standing in prerequisite courses. Students with a B- or higher grade in prerequisite courses will, in most instances, have no difficulty gaining admission to subsequent courses.

UNDERGRADUATE PROGRAMS

Undergraduate courses offered by the Department of Computer Science may be taken by all students in the Faculty of Arts and Science for full credit toward a degree in that Faculty.

All first year students wishing to complete a degree in Computer Science register in the Faculty of Arts and Science. Students planning to complete a Major or Honours degree in Computer Science register in the Faculty of Engineering upon declaring their degree program. Students planning to complete one of the Combined degree programs offered by Computer Science and Mathematics and Statistics, or a General program involving Computer Science, continue to be registered in the Faculty of Arts and Science. Students planning to complete a double Major or double Honours degree in Computer Science and another discipline can choose to register in the Faculty of Engineering or the faculty of the other discipline.

Students planning to complete a degree with a Computer Science designation must inform the Department of this fact before registering for third year by completing a Degree Intention Form which may be obtained from the Computer Science Coop/Advising Office. They must also file a Record of Degree Program form before registering for third year in the Faculty of Engineering or during the third year in the case

of the Faculty of Arts and Science. For the Faculty of Arts and Science, Degree Programs are submitted to the Arts and Science Advising Centre. For the Faculty of Engineering, Computer Science Degree Programs are submitted to the Computer Science Coop/Advising Office.

MAJOR AND HONOURS PROGRAMS

Students who wish to be admitted to the Honours program should apply in writing to the Chair of the Department on completion of their second year. Normally a student will be admitted to the Honours program only if the student meets the following conditions: completion of 112, 115, 225, 230 and 275; completion of at least 10½ units of the Mathematics and Statistics courses required for the degree; attainment of an overall grade point average in second year of at least 6.50; and attainment of a grade of B+ or higher in each 200 level Computer Science course completed. Students may be admitted to the Honours program upon completion of their third year providing

i) they have completed all of the 100 level and 200 level courses required for the Honours degree with a grade point average of at least 6.00 in these courses, and

ii) they have completed at least 9 units of 300 level courses in Computer Science (including 320, 322 and 360) and have obtained a grade point average of at least 6.50 over all 300 level Computer Science courses taken.

Honours students who do not obtain a grade point average of at least 6.00 in the seven required 300 level Computer Science courses must withdraw from the Program.

A student graduating in the Honours Program will be recommended for a First Class Honours degree if the student has achieved a First Class graduating average and an average of at least 6.50 in courses numbered 300 or higher taken in the Department. A student who completes the Honours degree requirements without attaining first class standing but with a departmental and graduating average of at least 5.00 will be recommended for a Second Class Honours degree.

Year	B.Sc. Major		B.Sc. Honours	
I	C SC 110[1]/112/115	(4½)	C SC 110[1]/112/115	(4½)
	MATH 100/101	(3)	MATH 100/101	(3)
	ENGL 115, ENGR 240[2]	(3)	ENGL 115, ENGR 240[2]	(3)
	Electives[1]	(4½)	Electives[1]	(4½)
II	C SC 225/230/250 /275	(6)	C SC 225/230/250 /275	(6)
	MATH 201/224/233A	(4½)	MATH 200/201/224	
	Electives	(4½)	/233A/233C	(7½)
			Elective	(1½)
III	C SC 320/360/365/370	(6)	C SC 320/322/330/349A	
	C SC 340 or 349A	(1½)	360/365/370	(10½)
	STAT 250[3]/MATH 324	(3)	STAT 250[3]/MATH 324	(3)
	Other Courses[4]	(4½)	Other Courses[5]	(1½)
IV	4½ units of C SC at the 400 level	(4½)	10½ units of C SC at the 400 level	(10½)
	Other Courses[4]	(10½)	Other Courses[5]	(4½)

[1] Students with a grade of A in Computer Science 12 omit C SC 110, and take an additional 1½ units of electives.

[2] ENGL 225 can replace ENGR 240 but this requires 3 units of first year English.

[3] STAT 250 may be taken as early as the second term of the first year.

[4] These 15 units of other courses must include 3 units of Computer Science at the 300 level, or above.

[5] These 6 units of other courses must include 3 units from the Department of Mathematics and Statistics at the 300 level or above.

NOTES:

(1) All students taking a degree in Computer Science are strongly advised to take some University courses outside the Computer Science and Mathematics and Statistics Departments.

(2) Any students who demonstrate to the Department that they have mastered the material of a course may be granted advanced placement.

(3) Students from outside British Columbia, students transferring from community colleges and students who have obtained credit for Grade XIII Mathematics must consult the Department before enrolling in any Computer Science course.

(4) in each line below students may obtain credit for only one Computer Science course.

240 or 340
225 or 325
370 or 470
425 or 420
435 or 471
455 or 460

(5) Students wishing to complete a degree in Computer Science with transfer credit for C SC 110 and 115 or C SC 115 and 230 will normally take C SC 112 during their first term of attendance at the University of Victoria in which it is offered if they do not already have credit for an equivalent course.

GENERAL PROGRAM AND COMBINED PROGRAMS IN COMPUTER SCIENCE AND MATHEMATICS

Requirements for these programs are located on page 66 in the Computer Science entry in the Faculty of Arts and Science section of this calendar.

COMPUTER SCIENCE COOPERATIVE EDUCATION PROGRAM

Full time students admitted to the Cooperative Education Program participate in a combined Computer Science and Mathematics Cooperative Education Program during their first two years. In their third year they may opt to complete a degree program in either Computer Science or Mathematics, and will enter the Coop program in that department. Students who opt for the Major or Honours in Combined Computer Science and Mathematics, or for a Double Major or Double Honours in Computer Science and Mathematics will remain in the Combined Computer Science/Mathematics Coop.

The minimum academic requirements for entering the Computer Science and Mathematics Program are a grade point average of 4.50, a minimum grade point average of 5.50 in courses completed in the Departments of Computer Science and Mathematics and Statistics, and a grade of at least B- in each course completed in the Departments of Computer Science and Mathematics and Statistics.

Students are normally admitted to the Program in January after their first term on campus, and application for admission should be made before the end of the first term. However, under exceptional circumstances, a student may be admitted to the Program up to the end of their second year.

In order to complete the Computer Science Cooperative Program, or the Combined Computer Science and Mathematics Cooperative Program, students must successfully complete the thirteen lower level courses specified in the following table:

Year 1:	C SC 112/115[1]	(3)
	MATH 100/101	(3)
	STAT 250[2]	(1½)
Subsequent Years[3]:	C SC 225/230/275	(4½)
	MATH 200/201/224/233A/233C	(7½)

[1] Students without a grade of A in Computer Science 12 are also required to take 110.

[2] STAT 250 may be done in second year.

[3] These courses are normally done in second year except for MATH 233A/233C which may be done in third year.

In addition, in order to graduate in the Computer Science or Combined Computer Science and Mathematics Cooperative Program, students must successfully complete a minimum of four Work Terms (the granting of Work Term credit by challenge is not permitted) and satisfy the course requirements of any of the Major or Honours degree programs offered by the Department of Computer Science.

Students registered in the Coop Program must be enrolled in at least 6 units of course work during each Campus Term. The performance of students will be reviewed after each Campus Term and each Work Term. Students whose performance is deemed to be unsatisfactory by the

Computer Science and Mathematics Coop Committee may be required to withdraw from the Program.

Each Work Term is recorded on the student's academic record and transcript (as COM, N or F) and details of Work Terms are recorded on the Record of Work Terms which is attached to the student's academic record and transcript.

Further information concerning the Cooperative Education Program in Computer Science may be obtained from the Department.

NOTES:

(1) Each student who is admitted to the Coop Program during their first year of university must complete all five scheduled Work Terms.

(2) Students who transfer from other institutions and all students admitted to the Coop Program in their second year of university must complete at least four Work Terms and must complete all scheduled Work Terms in their program.

DEPARTMENT OF ELECTRICAL AND COMPUTER ENGINEERING

Adam Zielinski, B. Eng., M.Eng., Ph.D. (Wroclaw), P.Eng., Associate Professor and Acting Chair of the Department

Andreas Antoniou, B.Sc., Ph.D. (Lond.), F.I.E.E.E., F.I.E.E., P.Eng., C.Eng., Professor

Vijay K. Bhargava, B.Sc. (Rajasthan), B.Sc., M.Sc., Ph.D. (Queen's), P.Eng. Professor

R. Lynn Kirlin, B.S., M.S. (Wyo.), Ph.D. (Utah State), P.Eng., Professor

Eric G. Manning, B.Sc., M.Sc. (Wat.), Ph.D. (Ill.), F.I.E.E.E., P. Eng., Professor

Panajotis Agathoklis, Dipl.El.Ing., Dr. Sc. Tech. (Swiss Fed. Inst. of Tech.), Associate Professor

Ashoka K.S. Bhat, B.Sc. (Mys.), B.E., M.E. (Indian Inst. of Sci.), M.A.Sc., Ph.D. (Tor.), P.Eng., Associate Professor

Jens Bornemann, Ing. (Fachhochschule, Hamb.), Dipl.-Ing., Dr.-Ing. (Bremen), Associate Professor

Nikitas J. Dimopoulos, B.Sc. (National & Kapodistrian U. of Athens), M.Sc., Ph.D. (Maryland), Associate Professor

Fayez El Guibaly, B.Sc. (Cairo), B.Sc. (Ain Shams), Ph.D. (Brit. Col.), P.Eng., Associate Professor

Harry H. L. Kwok, B.A. (Calif., L.A.), Ph.D. (Stan.), Associate Professor

Warren D. Little, B.A.Sc., M.A.Sc., Ph.D. (Brit. Col.), P.Eng., Associate Professor

Wu-Sheng Lu, B.Sc. (Fudan), M.Sc. (E. China Normal), M.Sc., Ph.D. (Minn.), Associate Professor

Ruediger Vahldieck, Ing. (Luebeck), Dipl.-Ing., Dr.-Ing. (Bremen), Associate Professor

Peter F. Driessen, B.Sc., Ph.D. (Brit. Col.), Assistant Professor

Jonathan M.-S. Kim, B.A.Sc., M.A.Sc., Ph.D. (Tor.), Assistant Professor

Kin Fun Li, B.Eng., Ph.D. (Conc.), Assistant Professor

Qiang Wang, B.Sc., M.Sc. (Nanjing), Ph.D. (U. of Vic.), Assistant Professor

Demetrios T. Pavlides, B. Eng. (Conc.), P.Eng., Manager of Laboratories

Visiting and Adjunct Appointments:

David M. Farmer, B.Com., M.Sc. (McG.), Ph.D. (Brit. Col.) Adjunct Professor (1990-92)

Marvin E. Jernigan, B.S., M.S., Ph.D. (M.I.T.), Visiting Professor (1990-91)

James S. Collins, B.Sc. (Dal.), B.Eng., M.Eng., (Nova Scotia Tech. Coll.), Ph.D. (Wash.), P.Eng., Adjunct Associate Professor (1990-92)

Tho Le-Ngoc, B.Eng. M.Eng., Ph.D. (Ott.), Adjunct Associate Professor (1990-92)

Dale Shpak, B.Sc., M.Eng. (Calg.), Ph.D. (U. of Vic.), Adjunct Assistant Professor (1990-92)

GRADUATE PROGRAMS

For information on studies leading to the M. Eng., M.A.Sc. and Ph.D. degrees, see page 229.

The Department participates in the Cooperative Education Program in the Faculty of Graduate Studies and by individual arrangement. Engineering graduate students may participate in a Cooperative Education graduate program as described in the Faculty of Graduate Studies section of this Calendar (page 260).

Further information may be obtained from the Department of Electrical and Computer Engineering Graduate Adviser.

Application forms for graduate admission are available from the Faculty of Graduate Studies.

UNDERGRADUATE PROGRAMS

The Department of Electrical and Computer Engineering offers programs leading to the B.Eng. degree in Electrical Engineering and the B.Eng. degree in Computer Engineering. Both programs have been accredited by the Canadian Engineering Accreditation Board of the Canadian Council of Professional Engineers. Accreditation ensures that graduates of the programs satisfy the academic requirements for registration with the provincial Associations of Professional Engineers.

The B.Eng. program in Electrical Engineering consists of the Engineering Core (see above), the Electrical Engineering Core, and one of three Elective Options.

Electrical Engineering Core

CENG 390	Digital Design: I
CENG 440	Digital Design: II
C SC 230	Computer Architecture and Assembly Language
ELEC 220	Electrical Properties of Materials
ELEC 250	Linear Circuits: I
ELEC 260	Signal Analysis: I
ELEC 300	Linear Circuits: II
ELEC 310	Signal Analysis: II
ELEC 320	Electronic Devices: I
ELEC 330	Electronic Circuits: I
ELEC 340	Electromagnetic Field Theory
ELEC 350	Communications Theory and Systems: I
ELEC 360	Control Theory and Systems: I
ELEC 370	Electromechanical Energy Conversion
ELEC 380	Electronic Circuits: II
ELEC 395	Seminar
MECH 245	Engineering Fundamentals: I
MECH 295	Engineering Fundamentals: II

Electrical Engineering Elective Options

Microelectronics and VLSI Systems

ELEC 410	Power Electronics
ELEC 415	Microelectronics Technology
ELEC 465	Design of VLSI Systems
ELEC 470	Electronic Devices: II

Two electives from List A
Two electives from List B

Communications and Signal Processing

ELEC 400	Random Signals
ELEC 404	Microwave and Optical Communications Systems: I
ELEC 408	Analog Filters
ELEC 450	Communications Theory and Systems: II
ELEC 454	Microwave and Optical Communications Systems: II
ELEC 458	Digital Filters

One elective from List A
One elective from List B

Control Systems and Robotics

CENG 445	Microprocessor Systems
ELEC 403	Engineering Design by Optimization
ELEC 425	Robotics: I
ELEC 460	Control Theory and Systems: II
ELEC 475	Robotics: II

One elective from List A
Two electives from List B

The B.Eng. program in Computer Engineering consists of the Engineering Core (see page 192), the Computer Engineering Core, and a set of elective courses.

Computer Engineering Core

C SC 275	File Structures for Data Processing*
C SC 225	Algorithms and Data Structures
C SC 230	Computer Architecture and Assembly Language
C SC 360	Introduction to Operating Systems
C SC 365	Software Engineering
CENG 245	Discrete Structures
CENG 390	Digital Design: I
CENG 420	Artificial Intelligence
CENG 440	Digital Design: II
CENG 445	Microprocessor Systems
CENG 450	Computer Systems and Architecture
CENG 455	Real Time Computer Systems
CENG 460	Computer Communication Networks**
ELEC 220	Electrical Properties of Materials
ELEC 250	Linear Circuits: I
ELEC 260	Signal Analysis: I
ELEC 300	Linear Circuits: II
ELEC 310	Signal Analysis: II
ELEC 320	Electronic Devices: I
ELEC 330	Electronic Circuits: I
ELEC 350	Communications Theory and Systems: I
ELEC 360	Control Theory and Systems: I
ELEC 380	Electronic Circuits: II
MECH 245	Engineering Fundamentals: I

* For students who have completed Term 2A before 1987.
** For students who have completed Term 2A in 1987 or later.

Computer Engineering Elective Courses

One elective from List A
One elective from List B

Elective Courses

List A May-August Term

CENG 245	Discrete Structures
CENG 445	Microprocessor Systems
C SC 275	File Structures for Data Processing*
ELEC 400	Random Signals
ELEC 403	Engineering Design by Optimization
ELEC 404	Microwave and Optical Communications Systems: I
ELEC 408	Analog Filters
ELEC 410	Power Electronics
ELEC 415	Microelectronics Technology
ELEC 425	Robotics: I
ELEC 499	Technical Project
MECH 410	Computer Aided Design

List B January-April Term

CENG 460	Computer Communication Networks
C SC 330	Programming Languages
C SC 349B	Numerical Analysis: II
ELEC 450	Communications Theory and Systems: II
ELEC 454	Microwave and Optical Communications Systems: II
ELEC 458	Digital Filters
ELEC 460	Control Theory and Systems: II
ELEC 465	Design of VLSI Systems
ELEC 470	Electronic Devices: II
ELEC 475	Robotics: II
ELEC 485	Pattern Recognition
ELEC 499	Technical Project
MECH 460	Computer Aided Manufacture

* For students who have completed Term 2A before 1987.

ACADEMIC SCHEDULE

a) Terms 1A and 1B of B.Eng. in Electrical Engineering and B.Eng. in Computer Engineering.

Term 1A	Term 1B
C SC 110	CHEM 150
ENGL 115	C SC 160
MATH 100	ENGR 150
MATH 133	MATH 101
PHYS 120	PHYS 125

b) Terms 2A to 4B of B.Eng. in Electrical Engineering

Schedule A: For students who have completed Term 2A in 1987 or earlier.

Term 2A	Term 2B	Term 3A	Term 3B
ELEC 216	C SC 230	C SC 349A	CENG 390
ELEC 220	ELEC 250	ELEC 300	ELEC 350
ENGR 240	ELEC 260	ELEC 310	ELEC 360
MECH 245	MECH 295	ELEC 320	ELEC 370
MATH 200	ENGR 280	ELEC 330	ELEC 380
STAT 254	MATH 201	ELEC 340	ELEC 395

Term 4A	Term 4B
CENG 440	ENGR 497*
ENGR 447*¤	ENGR 498*
Elective Option	Elective Option

Plus ENGR 446 Technical Report to be completed during last work term.

* One of these courses will be offered in 4A, the other two courses will be offered in 4B. Students should consult the Undergraduate Office to confirm actual sequence.

¤ May be replaced by courses in humanities, social sciences, arts, management, engineering economics or communications at a challenging level, as required by CEAB guidelines for complementary studies, and as approved by the Faculty of Engineering's Undergraduate Studies Committee.

Schedule B: For students who have not completed Term 2A in 1987 or students who will complete Term 2A after 1987.
Schedule A with the following change:
Interchange STAT 254 and C SC 230

c) Terms 4A and 4B of B.Eng. in Electrical Engineering Elective Options

Microelectronics and VLSI Systems

Term 4A	Term 4B
ELEC 410	ELEC 465
ELEC 415	ELEC 470
Two electives from List A	Two electives from List B

Communications and Signal Processing

Term 4A	Term 4B
ELEC 400	ELEC 450
ELEC 404	ELEC 454
ELEC 408	ELEC 458
One elective from List A	One elective from List B

Control Systems and Robotics

Term 4A	Term 4B
CENG 445	ELEC 460
ELEC 403	ELEC 475
ELEC 425	
One elective from List A	Two electives from List B

d) Terms 2A to 4B of B.Eng. in Computer Engineering

Schedule A: For students who have completed Term 2A before 1987.

Term 2A	Term 2B	Term 3A	Term 3B
ELEC 216	C SC 230	CENG 245	CENG 390
ELEC 220	C SC 275	C SC 349A	C SC 225
ENGR 240	ELEC 250	ELEC 300	ELEC 350
MECH 245	ELEC 260	ELEC 310	ELEC 360
MATH 200	ENGR 280	ELEC 320	ELEC 380
STAT 254	MATH 201	ELEC 330	ELEC 395
	Term 4A	**Term 4B**	
	CENG 440	CENG 450	
	CENG 445	CENG 455	
	C SC 360	CENG 420	
	C SC 365	ENGR 497*	
	ENGR 447*¤	ENGR 498*	
	One elective	One elective	
	from List A	from List B	

Plus ENGR 446 Technical Report to be completed during last work term.

* One of these courses will be offered in 4A, the other two courses will be offered in 4B. Students should consult the Undergraduate Office to confirm actual sequence.

¤ May be replaced by courses in humanities, social sciences, arts, management, engineering economics or communications at a challenging level, as required by CEAB guidelines for complementary studies, and as approved by the Faculty of Engineering's Undergraduate Studies Committee.

Schedule B: For students who have completed Term 2A in 1987.
Schedule A with the following changes:
- Replace C SC 275 by CENG 245
- Replace CENG 245 by C SC 225
- Replace C SC 225 by C SC 360
- Replace C SC 360 by CENG 420
- Replace CENG 420 by CENG 460

Schedule C: For students completing Term 2A after 1987.
Schedule A with the following changes:
- Interchange STAT 254 and C SC 230
- Replace C SC 275 by CENG 245
- Replace CENG 245 by C SC 225
- Replace C SC 225 by C SC 360
- Replace C SC 360 by CENG 420
- Replace CENG 420 by CENG 460

DEPARTMENT OF MECHANICAL ENGINEERING

Behrouz Tabarrok, B.Sc. (Wolverhampton Polytech.), D. Phil. (Oxon.), P.Eng., F.C.S.M.E., F.E.I.C., Professor and Chair of the Department
Sadik Dost, B.Sc., M. Sc. (Karadeniz Tech. U.), Ph.D. (Istanbul Tech. U.), P.Eng., Professor
David S. Scott, B.Sc., M.Sc. (Queen's), Ph.D. (Northw.), P.Eng., Professor
Yury Stepanenko, Dip.Eng. (Moscow Inst. of Machine Tool Eng.), Candidate of Science (Moscow Eng. Res. Inst.), D.Sc. (Academy of Science, U.S.S.R.), Professor
Geoffrey W. Vickers, Dip.Eng. (Birm.), M.Sc., Ph.D. (Manc.), P.Eng., C.Eng., Professor
Nedjib Djilali, B.Sc. (Hatfield Polytech.), M.Sc. (Lond.), Ph.D. (Brit. Col.), Assistant Professor
Zuomin Dong, B.Sc. (Beijing Polytech.), M.Sc., Ph.D. (N.Y. State), Assistant Professor
Gerard F. McLean, B.A.Sc., M.A.Sc., Ph.D. (Wat.), Assistant Professor
Meyer Nahon, B.Sc. (Queen's), M.Sc. (Tor.), Ph.D. (McG.), Assistant Professor
Ron P. Podhorodeski, B.Sc., M.Sc. (Man.), Ph.D. (Tor.), Assistant Professor
Inna Sharf, B.Sc., Ph.D. (Tor.), Assistant Professor
Joanne Wegner, B.Sc. (Calg.), M.Sc., Ph.D. (Alta.), Assistant Professor

Visiting and Adjunct Appointments:

Allan G. Doige, B.E., M.Sc. (Sask.), Ph.D. (Purdue), P.Eng., Adjunct Professor (1989-91)
James B. Haddow, B.Sc. (St. And.), M.Sc. (Alta.), Ph.D. (Manc.), Adjunct Professor (1990-92)
Eric H. Richardson, B.A., M.A. (Brit. Col.), Ph.D. (Tor.), Adjunct Professor (1989-91)
Tom S. Sankar, B.Eng. (Mad.), M. Eng. (Indian Inst. of Sc.), Ph.D. (Wat.), Adjunct Professor (1990-92)
David R. Topham, Ph.D. (Lough.), P.Eng. Adjunct Professor (1989-91)
Hans-Holger Rogner, Dipl. Ind Eng., Ph.D. (Karslruhe), Visiting Associate Professor (1991)
Webster R. Johnson, B.S., M.S. (Calif., Berk.), Ph.D. (Tor.), Visiting Research Assistant Professor (1990-91)

Senior Technical Personnel:

David L. Gawley, B.Sc. (Wat.), Senior Scientific Assistant
Minh Hi Ly, B. Eng. (Ho Chi Minh Polytech.), Senior Scientific Assistant
Arthur Makosinski, B.A. (Newark St. Coll.), Manager of Laboratories

GRADUATE PROGRAMS

For information on studies leading to the M.Sc., M.A.Sc. and Ph.D. degrees, see page 241.

UNDERGRADUATE PROGRAMS

The Department of Mechanical Engineering offers a program leading to the B.Eng. degree. The program is designed to meet all the requirements of the Accreditation Board of the Canadian Council of Professional Engineers and provide sufficient flexibility for some measure of specialization in the areas of Computer Aided Design and Computer Aided Manufacturing (CAD/CAM), Robotics, Energy Systems, Computational Mechanics, and Production Management. In accordance with the regulations of the Accreditation Board, the program will be evaluated during the final year of the first graduating class. This will take place in the 1991-92 academic year.

The program B.Eng. in Mechanical Engineering consists of the Engineering Core (see page 189), Mechanical Engineering Core, and six Technical Electives.

Mechanical Engineering Core

ELEC 250	Linear Circuits: I
ELEC 365	Applied Electronics and Electrical Machines
MATH 321	Differential Equations for Engineers
MECH 220	Mechanics of Solids: I
MECH 240	Thermodynamics
MECH 241	Statics
MECH 242	Dynamics
MECH 285	Properties of Engineering Materials
MECH 320	Mechanics of Solids: II
MECH 330	Machine Dynamics
MECH 335	Theory of Mechanisms
MECH 345	Mechanics of Fluids: I
MECH 350	Engineering Design: I
MECH 360	Engineering Design: II
MECH 380	Automatic Control Engineering
MECH 390	Energy Conversion Systems
MECH 395	Heat and Mass Transfer
MECH 400	Design Project
MECH 455	Instrumentation
MECH 492	Mechanics of Fluids: II

Mechanical Engineering Technical Electives*

Design and Computer Aided Engineering

MECH 410	Computer Aided Design
MECH 420	Finite Element Applications
MECH 470	Applied Theory of Elasticity

Engineering Manufacture & Business Management

MECH 411	Organization of the Production Process
MECH 412	Industrial Economics
MECH 460	Computer Aided Manufacture
MECH 461	Plasticity and Manufacturing Process
MECH 462	Small Business Organization

Ocean Engineering

MECH 440	Introduction to Water Wave Phenomena
MECH 490	Underwater Acoustics and Applications
MECH 491	Wave Forces on Offshore Structures

Robotics

MECH 430	Robotics
MECH 480	Advanced Control Theory
MECH 485	Mechanism and Manipulator Synthesis
MECH 499	Technical Project

* With the permission of the Department, students may select courses as technical electives, from the list of 500 level Mech. Engg. Graduate courses.

ACADEMIC SCHEDULE

a) Terms 1A and 1B of B. Eng. in Mechanical Engineering

Term 1A	Term 1B
C SC 110	CHEM 150
ENGL 115	C SC 160
MATH 100	ENGR 150
MATH 133	MATH 101
PHYS 120	PHYS 125

b) Terms 2A to 3B of B.Eng. in Mechanical Engineering

Schedule A: For students who have completed Term 1B after 1990

Term 2A	Term 2B	Term 3A	Term 3B
ELEC 216	STAT 254	CSC 349A	ELEC 365
ENGR 240	ENGG 280	MECH 320	MECH 395
MECH 241	MECH 220	MATH 321	MECH 330
MATH 200	MECH 242	MECH 335	MECH 360
MATH 201	MECH 285	MECH 350	MECH 390
MECH 240	ELEC 250	MECH 345	MECH 380

Schedule B: For students who have completed Term 2B in 1990

Term 2A	Term 2B	Term 3A	Term 3B
ELEC 216	STAT 254	C SC 349A	ELEC 365
ENGR 240	ENGG 280	MECH 285	MECH 395
MECH 245	MECH 320	MECH 330	MECH 355
MATH 200	MECH 350	MECH 335	MECH 360
MATH 201	ELEC 250	MECH 240	MECH 390
MECH 220	MATH 321	MECH 345	MECH 380

Schedule C: For students who have completed Term 2A in 1990

Term 2A	Term 2B	Term 3A	Term 3B
ELEC 216	STAT 254	C SC 349A	ELEC 365
ENGR 240	ENGG 280	MECH 320	MECH 395
MECH 245	MECH 285	MATH 321	MECH 360
MATH 200	MECH 240	MECH 335	MECH 390
MATH 201	ELEC 250	MECH 350	MECH 380
MECH 220	MECH 242	MECH 345	MECH 330

c) Terms 4A and 4B of B.Eng. in Mechanical Engineering

Term 4A	Term 4B
ENGR 447¤*	ENGR 497*
MECH 400	ENGR 498*
MECH 492	MECH 455
3 electives from List A	3 electives from List B

Plus ENGR 446 Technical Report to be completed during last work term.

* One of these courses will be offered in 4A, the other two courses will be offered in 4B. Students should consult the Undergraduate Office to confirm actual sequence.

¤ May be replaced by courses in humanities, social sciences, arts, management, engineering economics or communications at a challenging level, as required by CEAB guidelines for complementary studies, and as approved by the Faculty of Engineering's Undergraduate Studies Committee.

d) Technical Elective Courses*

List A May-August Term	List B January-April Term
MECH 410	MECH 420
MECH 411	MECH 460
MECH 412	MECH 461
MECH 430	MECH 462
MECH 440	MECH 480
MECH 470	MECH 485
MECH 490	MECH 491
MECH 499	MECH 499

* Students in the 3B term will be asked to decide on the courses they would select in terms 4A and 4B. Providing such elected courses have an adequate enrollment, they will be offered by the Department.

UNDERGRADUATE COURSES IN THE FACULTY OF ENGINEERING

Students are advised that enrollment in courses and degree programs may be limited by the availability of staff and resources.

Students who have not been admitted to the Faculty of Engineering will not be permitted to register in ENGR, CENG, ELEC or MECH courses except with the prior written permission of the Dean.

(Course offering codes: Y = Sept.-Apr., F = Sept.-Dec., S = Jan.-Apr., K = May-Aug., NO = Not offered, this session)

ENGINEERING COURSES

ENGR 150 (formerly ENGR 100) (1½) ENGINEERING GRAPHICS

Basic concepts of hardware and graphics software; development of graphics software; theories of perspective, orthographic and isometric projections; algorithms for 2-D and 3-D transformations and computer representation of physical shapes; elements of descriptive geometry, freehand sketching, dimensioning and sectioning. Use of CAD software packages. (*Prerequisite:* C SC 160 which may be taken concurrently)

(3-2)

ENGR 240 (1½) TECHNICAL WRITING

This course will focus on searching and referencing methods used in dealing with scientific and technical literature and on the characteristics of effective technical and scientific style. The emphasis throughout will be on clarity, precision, and consistency. Students will acquire practical experience in the writing of short technical documents such as memoranda, letters and abstracts, longer forms such as reports, papers, and theses, and instructional forms such as manuals, brochures, and specifications. (*Prerequisite:* ENGL 115) F(3-0)

ENGR 280 (1½) ENGINEERING ECONOMICS

Principles of economic decision making and choice. Demand, production and cost analysis; net present value, equivalent annual value and rate of return criteria; cost of capital, decision making under risk and uncertainty; public project evaluation, externalities and public goods. (*Prerequisites:* MATH 133 and 200 and STAT 254 which may be taken concurrently) K(3-0-1)

ENGR 446 (1) TECHNICAL REPORT

All students in the B.Eng. programs must submit a technical report on

entering their final term. The preparation of this report will provide students with an opportunity to demonstrate their written communication skills. The report topic must be approved by an Engineering Co-op Coordinator at least 2 months prior to submission, and the letter of approval must accompany the report. The report must be prepared according to the Work Term Report Guidelines in effect at the time of the topic submission. The report must be submitted to the Engineering Co-operative Education Office by the first day of classes of the Spring term. (*Prerequisites:* 240, and completion of term 4A) F

ENGR 447 (1½) TECHNOLOGY AND THE INDIVIDUAL
This course introduces the student to the interaction between the person and technology. The psychological effects of technology on the person's behavior, values and well being will be considered, as will human efforts to adapt machines to individuals. The impact of technological development on the family, the community and the organization will be assessed. (*Prerequisite:* Completion of terms 1A to 3B) K or S(3-0)

ENGR 497 (1½) TECHNOLOGY AND SOCIETY
This course introduces the student to the effects of technology on society. The ethical, environmental, economic and political issues raised by technological change will be emphasized. (*Prerequisite:* Completion of terms 1A to 3B) K or S(3-0)

ENGR 498 (1½) ENGINEERING LAW
Sources and classification of law; professional engineering legislation, registration and discipline; introduction to tort law including negligence; introduction to contract law including employment law. Ethics in professional practice. (*Prerequisite:* Completion of terms 1A to 3B) K or S(3-0)

COMPUTER ENGINEERING COURSES

CENG 245 (formerly 345) (1½) DISCRETE STRUCTURES
Set algebra; mappings and relations with applications in communications systems. Algebraic structures; semigroups and groups. Theory of undirected and directed graphs with applications in systems and circuit analysis. Boolean algebras, propositional logic, and introduction to the theory of automata with applications in digital design. (Prerequisites: MATH 101 and 133) K(3-0)

CENG 390 (1½) DIGITAL DESIGN: I
Binary Boolean algebra and its application to switching circuits. Transistor gates and their practical limitations. Integrated circuit logic families, such as DTL, TTL, ECL, MOSL and CMOSL. Application of combinational MSI and LSI circuits to electronic systems and instrumentation. (*Prerequisite:* ELEC 330) F(3-3)

CENG 420 (formerly 490) (1½) ARTIFICIAL INTELLIGENCE
Philosophy of artificial intelligence. AI programs and languages, representations and descriptions, exploiting constraints. Rule based and heuristic systems. Applications to engineering. (*Prerequisite:* C SC 225) K(3-0)

CENG 440 (1½) DIGITAL DESIGN: II
Analysis, design, and practical limitations of flip flops. Characterization, analysis, design, and optimization of clock mode, pulse mode, and level mode sequential circuits. Practical limitations of sequential circuits and hazards. Design of registers, counters, and random access memories. Application of MSI and LSI sequential circuits to electronic systems and instrumentation. (*Prerequisite:* 390) K(3-1½)

CENG 445 (1½) MICROPROCESSOR SYSTEMS
Introduction to microprocessor architecture. Instruction set, addressing mode, and programming. Memories, I/O systems, and interfacing. Developmental systems. Application to engineering systems. (*Prerequisites:* 440, which may be taken concurrently; C SC 230) K(3-1½)

CENG 450 (1½) COMPUTER SYSTEMS AND ARCHITECTURE
Computer architectures and operating systems involving concurrency, parallel processing, real time processing, and computer communications. Topics covered include synchronization, deadlock, name management, resource allocation, pipelining, multiprocessors, packet switching networks, protocol design and verification, distributed systems. (*Prerequisites:* 440 and C SC 360) S(3-3)

CENG 455 (1½) REAL TIME COMPUTER SYSTEMS
Application of microcomputers and minicomputers to real time systems, e.g., data acquisition and control systems. I/O devices and instrumentation for real time applications. Design and simulation of real time systems. Real time operating systems. (*Prerequisites:* 445, ELEC 360 and C SC 360) S(3-1½)

CENG 460 (1½) COMPUTER COMMUNICATION NETWORKS
Introduction to computer networking principles and engineering including remote access, wide-area networking, local area networks, network topology, communication hardware and software protocols, open-system-interconnection model, routing and flow control, performance, reliability, security, example networks. (*Prerequisites:* C SC 230 and ELEC 350) S(3-0)

COMPUTER SCIENCE COURSES

C SC 100 (1½) ELEMENTARY COMPUTING
An introduction to computing for the nonspecialist. Topics covered include the basic structure of a digital computer system; applications of computers in the home, office and industry; and implications of computers for society. Hands-on experience with a microcomputer and the use of some practical software packages are given. (*Prerequisite:* Algebra 11) (NOTE: This course is designed for a general university audience; students intending to Major in Computer Science should enroll in 110 or 112 rather than 100.) (Not open to students with credit in any of Computer Science 12, 110, 112, or equivalent. Normally not open to students with credit in Computer Studies 11) FS(2-2)

C SC 110 (1½) COMPUTER PROGRAMMING: I
An introduction to problem-solving methods and algorithm development using a procedural programming language. Topics include: computer problem solving and algorithms, variables, data types, procedures, top-down design, criteria for modular design, program control, program documentation, character manipulation, structured data types, functions, recursion, dynamic data structures, and various applications. (*Prerequisite:* Algebra 12) (NOTE: Not normally open to students with a grade of A in Computer Science 12 unless registered in a B.Eng. program) FS(3-1)

C SC 112 (1½) INTRODUCTION TO COMPUTER SCIENCE
An introduction to both theoretical and practical aspects of Computer Science. Topics include: program design, boolean algebra and logic design, basic computer organization, system software, nonprocedural languages, theory of computation, and applications of computers. (*Prerequisites:* Algebra 12 and a grade of A in Computer Science 12 or a grade of C or higher in C SC 110) FS (3-1)

C SC 115 (1½) COMPUTER PROGRAMMING: II
A continuation of the development and implementation of algorithms begun in Computer Science 110. The emphasis of the course is on the design, implementation and analysis of software using data types. In particular, stacks, lists, queues, and trees will be studied. Applications and representations of these types will be presented, and methods for analyzing them will be introduced. A short introduction to numerical methods will be provided. Some knowledge of calculus (e.g., MATH 100 or 102) is desirable. (*Prerequisite:* 110 or 112, or written permission of the Department) FS(3-1)

C SC 160 (1½) COMPUTER PROGRAMMING: II FOR ENGINEERS
A continuation of the development and implementation of algorithms begun in Computer Science 110. The emphasis of the course is on the design, implementation and analysis of software using data types. In particular, stacks, lists, queues, and trees will be studied. Applications and representations of these types will be presented, and methods for analyzing them will be introduced. A short introduction to numerical methods will be provided. Selected scientific and engineering examples will be used to illustrate the application of the concepts presented. (Credit will not be given for both 115 and 160.) (*Prerequisites:* 110 or 112, MATH 100, and admission to a B.Eng. program) S(3-1)

C SC 200 (1½) COMPUTERS IN STATISTICAL APPLICATIONS
This course will provide the nonspecialist computer user with the tools needed for scientific data analysis, statistical testing, and graphical displays. The statistical packages SAS and SPSS-X will be introduced. The student will learn to use plotting routines from SAS/GRAPH. FORTRAN will be studied together with an introduction to the NAG and IMSL libraries of scientific routines. (*Prerequisites:* One of ANTH 317, BIOL 250, ECON 240, GEOG 321, STAT 250, PSYC 300A, SOCI 371) (NOTE: Not open to students with credit in 110 or a grade of B or higher in Computer Science 12) F(2-2)

C SC 225 (formerly 325) (1½) ALGORITHMS AND DATA STRUCTURES
This course continues the study of data structures and nonnumerical algorithms begun in first year. It also introduces techniques for algorithm design and tools for analyzing time and space complety. Topics include abstract data types and their implementations; sorting, searching, tree and graph algorithms, and proof of algorithm correctness. (*Prerequisite:* 115 or 160, or written permission of the Department. FSK(3-0)

C SC 230 (1½) COMPUTER ARCHITECTURE AND ASSEMBLY LANGUAGE
The basic architecture of computer systems including fundamental concepts such as register structure, memory organization and machine-level operations. These concepts are integrated through the teaching of an assembly language and the operation of assemblers, linkers and loaders. Topics covered include: instruction types, symbolic addressing, relocatable assemblers and loaders, data and address buses, instruction fetch and execution, read/write cycles, interrupt processing. (*Prerequisites:* 112 and an additional 1½ units of 100 level Computer Science; or 160, or written permission of the Department) FS(3-1)

C SC 250 (1½) DIGITAL LOGIC AND COMPUTER ORGANIZATION
The fundamentals of logic design, computer organization and the structure of major hardware components of computers. The course discusses the application of Boolean algebra to switching circuits, and the use of combinational MSI and LSI circuits in digital design. Topics include number representation, combinational and sequential circuits, flip-flops, counters, memory organization, buses and arithmetic units. (*Prerequisites:* 112 and an additional 1½ units of 100 level Computer Science; or 160, or written permission of the Department. Pre- or corequisite 230 and MATH 224) FS(3-2)

C SC 275 (1½) FILE STRUCTURES FOR DATA PROCESSING
An introduction to the concepts and techniques of structuring and processing data maintained in secondary memory. Topics will include: common information requirements of business and other enterprises; the database package solution to data capture and report generation; the conceptual views of data and an introduction to data normalization; hardware for file storage; sequential file processing; external sort/merge; random access organizations such as inverted files, indexed sequential methods and B-trees; and the ethics of access to sensitive information. (*Prerequisite:* 115 or 160, or written permission of the Department) FSK(3-1½)

C SC 320 (1½) FOUNDATIONS OF COMPUTER SCIENCE
A survey of formal models and results that form the theoretical foundations of computer science; typical topics include finite automata, Turing machines, simple undecidable problems, context free languages and elementary computational complety. (*Prerequisites:* 115 or 160, and MATH 222 or 224, or written permission of the Department) FK(3-0)

C SC 322 (1½) LOGIC AND PROGRAMMING
This course concentrates on the practical applications of logic in computer science and its relevance in such areas as software engineering, artificial intelligence and circuit design theory. Topics discussed will include the following: propositional expressions and circuits, reading and writing first order logic, predicate logic as a relational query language, knowledge representation, PROLOG, and other related topics. (*Prerequisites:* 115 or 160, and MATH 222 or 224 or PHIL 203 or 304A; or written permission of the Department) F(3-0)

C SC 330 (1½) PROGRAMMING LANGUAGES
A theoretical investigation of imperative and applicative programming languages; fundamental aspects of programming languages are covered. Topics include the description of data types, variables and imperatives (such as assignment); iteration and recursion; parameter passing mechanisms; type checking; and relevant implementation issues. Complete familiarity with a block structured imperative programming language, such as Pascal, is essential. (*Prerequisites:* 225, 230, and 275, or written permission of the Department) S(3-0)

C SC 340 (1½) (formerly 240) NUMERICAL METHODS
The study of computational methods for solving problems in linear algebra, nonlinear equations, approximation, and ordinary differential equations. The student will write programs in a suitable high level language to solve problems in some of the areas listed above but the course will also teach the student how to use mathematical subroutine packages currently available in computer libraries. (*Prerequisites:* 115 or 160; MATH 233A or 110 and 201; or written permission of the Department) (NOTE: Not open to students with credit in 349A or equivalent) F(3-0)

C SC 349A (1½) NUMERICAL ANALYSIS: I
An introduction to selected topics in Numerical Analysis. Typical areas covered: error analysis, roots of equations, systems of linear equations, linear programming, interpolation, numerical integration, and ordinary differential equations. (*Prerequisites:* 115 or 160, and MATH 200, 201 and 233A; or written permission of the Department) FS(3-0)

C SC 349B (1½) NUMERICAL ANALYSIS: II
An introduction to selected topics in Numerical Analysis. Typical areas covered: ordinary differential equations, numerical differentiation, approximation of functions, iterative methods for linear equations, eigenvalues and eigenvectors, systems of nonlinear equations, boundary-value problems and partial differential equations. (*Prerequisites:* 349A; or MATH 200 and a grade of B or higher in C SC 340) S(3-0)

C SC 350 (1½) COMPUTER ARCHITECTURE
This course will introduce the basic building blocks of a general purpose computer with emphasis on techniques for speed and performance enhancement. Topics will include: central processor organization, arithmetic algorithms, lookahead and parallelism, memory hierarchy, control unit and microprogramming, input output devices, case studies of some recent micro, mini, and mainframe computers. (*Prerequisites:* 225, 230, and 250, or written permission of the Department) S(3-0)

C SC 360 (1½) INTRODUCTION TO OPERATING SYSTEMS
An introduction to the major concepts of operating systems and study of the interrelationships between the operating system and the architecture of computer systems. Topics discussed include operating system structures, concurrent programming techniques, cpu scheduling, deadlocks, memory management, file systems and protection. (*Prerequisites:* 225 and 230, or written permission of the Department) FK(3-1)

C SC 365 (1½) SOFTWARE ENGINEERING
Techniques for the development and maintenance of software systems are described. The life cycle approach to software and the characteristics of life cycle products are included. The course covers material in requirements definition, specification, design, program testing and verification and validation. Contemporary and future software development environments are studied. (*Prerequisites:* 225 and third year standing, or written permission of the Department) FSK(3-2)

C SC 370 (formerly 470) (1½) DATABASE SYSTEMS
An introduction to the use and operating principles of traditional and current database management systems. Topics to be covered include: data entities and relationships; data modeling using Entity-Relation Diagrams: hierarchical, network and relational models of databases; query languages; physical representation of data in secondary storage; relational algebra and calculus as applied to the design of databases; security and integrity in the context of concurrent use; and basic ethical issues associated with database design and use. Assignments in this course will give the student opportunities to apply concepts using one or more database packages. (*Prerequisites:* 225 and 275, or written permission of the Department. Not open to students with credit in HINF 300) FS(3-0)

C SC 375 (1½) INTRODUCTION TO SYSTEMS ANALYSIS
This course introduces the student to many of the techniques used in analyzing a business data processing system. Topics discussed will include the following: project definition, preliminary design, man-machine interface, data gathering and analysis, data base design, system controls, hardware selection, and system testing, implementation and operation. Students will be assigned to a project team involved in a system study as part of the course. (*Prerequisites:* 225 and 275, or written permission of the Department) FS(3-0)

C SC 405 (1½) COMPUTER GRAPHICS
The objective of this course is to present the fundamental algorithms and data structures used in generative computer graphics. Topics discussed include structure of interactive graphics programs, raster algorithms, colour, two dimensional and three dimensional geometric transformations, animation, parallel and perspective projection, hidden line and hidden surface algorithms, cubic curves and surfaces, and shading models. Students will use high resolution raster display workstations, and other graphical devices. (*Prerequisites:* 225, MATH 222, and 3 units of 300 level Computer Science, or written permission of the Department) S(3-0)

C SC 425 (formerly 420) (1½) ANALYSIS OF ALGORITHMS
General techniques for designing and analyzing algorithms; an in depth examination of several problems and algorithms with respect to their time and space requirements; advanced data structures; sorting and searching; graph algorithms; backtracking; NP-complete problems; approximation algorithms. (*Prerequisites:* 225 and 320 and MATH 324, or written permission of the Department) F(3-0)

C SC 426 (1½) COMPUTATIONAL GEOMETRY
Algorithms and data structures that are used to solve geometrical problems. Topics include geometric searching, convex polygons and hulls, Voronoi diagrams, plane sweep algorithms, proximity, and intersections. Application areas which are discussed include: computer graphics, VLSI design, and graph theory. (*Prerequisites:* 225 and 4th year standing, or written permission of the Department) F(3-0)

C SC 435 (formerly 471) (1½) COMPILER CONSTRUCTION
This course includes the following aspects of compilation: lexical analysis, syntax analysis, semantic routines, code optimization, block structured languages and interpreters. Students will implement a compiler-interpreter for a simple language. (*Prerequisites:* 225 and 320, or written permission of the Department) F(3-2)

C SC 448A (1½) OPERATIONS RESEARCH: I
This course is primarily concerned with linear programming and its applications. Topics discussed will include the following: the simplex method, the revised simplex method, computer implementation of linear programming, duality, dual simplex and primal dual algorithms, parametric analysis and postoptimality analysis. Applications will include the transportation problem, the assignment problem, blending problems, inventory problems, activity analysis, game theory and network analysis. (*Prerequisite:* 349A; or fourth year standing and a grade of B or higher in 340) F(3-0)

C SC 448B (1½) OPERATIONS RESEARCH: II
This course provides an introduction to model design using queuing theory and simulation techniques. Topics covered include a brief introduction to queuing theory, basic ideas in simulation, random number generators, sampling, critical event and time slice methods, organization of a simulation study, and basic concepts of GPSS programming. (*Prerequisite:* 115 or 160, STAT 250 and any 300 level mathematics or computer science course) S(3-0)

C SC 449 (1½) TOPICS IN NUMERICAL ANALYSIS:
(Offered as C SC 449A, 449B) A thorough discussion of a topic selected from one of the following areas: numerical linear algebra; approximation theory; quadrature; or the numerical solution of differential equations. (*Prerequisite:* 349B, or written permission of the Department) (This course may be taken more than once in different topics with the permission of the Chair of the Department.) F(3-0)

C SC 450 (1½) COMPUTER COMMUNICATIONS AND NETWORKS
This course will introduce concepts in computer communications and networks. Topics will include layered network architectures, packet switching networks, local area networks, protocol design and verification, network security, and applications in distributed computing. (*Prerequisites:* 250 and 360, or written permission of the Department) FS(3-3)

C SC 454 (1½) FAULT TOLERANT COMPUTING
In this course, issues of fault tolerant computing are discussed, ranging from the choice of fault tolerant architectures to expert systems for the design and test of integrated circuits. Topics include: design and test of defect free integrated circuits, fault modelling, built in self test, data compaction, error correcting codes, simulation software/hardware, fault tolerant system design, CAD tools for design for testability. (*Prerequisites:* 250 and 3 units of 300 level Computer Science, or written permission of the Department) NO(3-0)

C SC 460 (formerly 455) (1½) DESIGN AND ANALYSIS OF REAL-TIME SYSTEMS
Fundamental issues in design of real-time operating systems and real-time application software are presented and analyzed. Typical topics include: hard real-time scheduling in centralized and in distributed systems, interrupt driven systems, process communication and synchronization, high-level language requirements for real-time systems, real-time constraints on implementation of synchronization primitives, decomposition of real-time requirements into process models, and case studies. A project involving actual design, implementation and testing of a real-time executive and real-time application software will also be included. (*Prerequisites:* 250 and 360, or written permission of the Department) S(3-3)

C SC 465 (1½) ADVANCED SOFTWARE ENGINEERING
Techniques for the construction of complex, maintainable and reliable software at reasonable cost. This course provides the opportunity to gain software engineering experience in a controlled environment. Methods for software specification and design are emphasized. Additional topics may include configuration management, testing, and software tools. (*Prerequisite:* 365) S(3-0)

C SC 480 (1½) THEORETICAL AND MATHEMATICAL TOPICS IN COMPUTER SCIENCE
(Offered as C SC 480A, 480B, 480C, 480D, 480E, 480F)
The topics in the course depend primarily on the interests of the instructor. The course may include, for example, one or more of the following topics: automata theory, analysis of algorithms, numerical analysis, and complety theory. Entry to this course will be restricted to third and fourth year students who meet the prerequisite specified for the topic to be offered. This course may be taken more than once in different topics with the permission of the Chair of the Department. FS(3-0)

C SC 481 (1½) TOPICS IN COMPUTER SCIENCE: SOFTWARE, HARDWARE, AND APPLICATIONS
(Offered as C SC 481A, 481B, 481C, 481D, 481E, 481F)
The topics in the course depend primarily on the interests of the instructor. The course may include, for example, one or more of the following topics: software engineering, data bases, computer graphics, and computer aided instruction. Entry to this course will be restricted to third and fourth year students who meet the prerequisite specified for the topic to be offered. This course may be taken more than once in different topics with permission of the Chair of the Department. FS(3-0)

C SC 490 (1½ or 3) DIRECTED STUDIES
Students must consult the Department before registering. Ths course may be taken more than once in different fields with permission of the Chair of the Department.

ELECTRICAL ENGINEERING COURSES

ELEC 216 (1½) FUNDAMENTALS OF ELECTRICAL ENGINEERING
Electric charge, Coulomb's Law, electrostatic forces, electric field, Gauss's Law, electric potential, stored energy. Electric current, conduc-

tion in a vacuum and in material media, displacement current, magnetic field of a current, force on a current carrying wire, magnetic induction, electromotive force, energy stored in a magnetic field. Magnetism and magnetic circuits. Time varying fields. Capacitance, resistance, inductance, and their characterization. (*Prerequisite:* MATH 200 which may be taken concurrently) F(3-3-1)

This course is equivalent to Physics 216.

ELEC 220 (1½) ELECTRICAL PROPERTIES OF MATERIALS

Materials for engineering; atomic bondings, crystalline structures, properties of metals, glasses, semiconductors, insulators and magnetic materials. Electronic conduction in solids and simple devices. Materials in engineering design and environmental effects. (*Prerequisite:* 216 which may be taken concurrently) F(3-0-1)

ELEC 250 (1½) LINEAR CIRCUITS: I

Current, voltage, power and energy; resistance, inductance and capacitance; sources. Series and parallel circuits. Formulation of equilibrium equations using Kirchoff's voltage and current laws. Network theorems: superposition, reciprocity, Thevenin, Norton, maximum power transfer. Step response of simple RC, RL and RLC circuits. Sinusoidal steady state response of RLC circuits, power in ac circuits, frequency response, resonance. Coupled coils and transformers. (*Prerequisites:* 216 and MATH 201 which may be taken concurrently) K(3-1½)

ELEC 260 (1½) SIGNAL ANALYSIS: I

Characteristics of continuous time signals and waveform calculations. The Fourier series and its application in the analysis of periodic signals. The impulse, unit step and other elementary functions. Resolution of signals into impulse and unit step functions. The Fourier transform and its application to spectral analysis. Functions of a complex variable and their derivatives. Analytic functions and Cauchy-Riemann equations. Rational, exponential, trigonometric, hyperbolic functions and the logarithm of a complex variable. Partial fractions. The Laplace transform and its application in the representation of signals. Interrelation between the Fourier and Laplace transforms. (*Prerequisites:* 216, and MATH 133 and 200) K(3-0)

ELEC 300 (1½) LINEAR CIRCUITS: II

Controlled sources and ideal amplifiers. Analysis of passive and active circuits using the Laplace transform. Loop and node methods and matrix characterization of complex circuits. Application of signal flow graphs. Driving point and transfer functions. Stability of active circuits. Infinite gain controlled sources as circuit elements and their representation by means of nullators, norators, and nullors. Analysis of circuits containing nullors. Two port networks and their characterization in terms of the h parameters and y parameters. Wave characterization and power transfer relations. Frequency response of active and passive circuits; use of Bode plots. Computer aided circuit analysis and design. (*Prerequisites:* 250 and 260) S(3-1½)

ELEC 310 (1½) SIGNAL ANALYSIS: II

Discrete time and sampled data signals and their generation by means of the sampling process. The impulse, unit step, and other discrete time elementary functions. Resolution of discrete time signals into impulse and unit step functions. Complex integrals and Cauchy's integral theorem. Complex sequences and series. The Taylor and Laurent series. Integration by the method of residues. The z transform and its application in the representation of discrete time signals. Advanced properties and convergence of the Laplace and Fourier transforms. Interrelations among continuous time, sampled data, and discrete time signals. The sampling theorem. The discrete Fourier transform and its relation with the continuous time Fourier transform and the Fourier series. (*Prerequisite:* 260) S(3-0)

ELEC 320 (1½) ELECTRONIC DEVICES: I

Crystal structure and valence model of pure and doped semiconductors. Mobility and electrical conductivity. Mode of operation, physical mechanisms and characteristics of pn junctions; junction capacitance; breakdown; varactor, Zener and tunnel diodes. Modes of operation, physical mechanisms, and characteristics of junction and metal oxide-silicon field effect transistors and bipolar transistors. (*Prerequisite:* 220) S(3-1½)

ELEC 330 (1½) ELECTRONIC CIRCUITS: I

Nonlinear devices. Modelling and application of diodes: rectifiers, voltage regulators, waveform shaping circuits. Biasing of bipolar and field effect transistors. Small signal amplifiers. Multistage amplifiers. Nonlinear applications of transistors. Computer aided circuit analysis and design. (*Prerequisites:* 300 and 320 both of which may be taken concurrently) S(3-1½)

ELEC 340 (1½) ELECTROMAGNETIC FIELD THEORY

Field concept, Maxwell's equations. Boundary conditions. Power and energy. Electrostatic field. Electrostatic potential. Concept of capacitance. Conformal mapping in electrostatics. Polarization. Concept of local field in matter. Magnetostatic field. Biot-Savart law. Scalar magnetic potential. Plane waves. Total internal reflection. Brewster angle. (*Prerequisites:* 216 and 260) S(3-0-1)

ELEC 350 (1½) COMMUNICATIONS THEORY AND SYSTEMS: I

Principles of amplitude, frequency and phase modulation. Modulators, mixers and demodulators. Representative examples of complete transmission systems. Qualitative treatment of modulation systems in the presence of noise. (*Prerequisites:* 310 and 330) F(3-1½)

ELEC 360 (1½) CONTROL THEORY AND SYSTEMS: I

Characterization of systems; linearity, time invariance, and causality. General feedback theory; time and frequency domain analysis of feedback control systems; Routh-Hurwitz and Nyquist stability criteria; root locus methods; modelling of dc servo; design of simple feedback systems; introduction to state space methods. (*Prerequisites:* 300 and 310) F(3-1½)

ELEC 365 (1½) APPLIED ELECTRONICS & ELECTRICAL MACHINES

Characteristics of transducers and electronic devices, analysis of electronic circuits such as power supplies and amplifiers; electric motors, generators, transformers, rectifiers and inverters. (*Prerequisite:* 216) F(3-1½)

ELEC 370 (1½) ELECTROMECHANICAL ENERGY CONVERSION

Faraday's law of electromagnetic induction, transformers and generators. Lorentz's force and Coulomb's force and their applications in industrial motors. Lumped parameter concepts of inductance and motional inductance. Energy and coenergy in the derivation of torques and forces. Structures and performance characteristics of dc, synchronous, and induction machines. (*Prerequisites:* 250 and MECH 245) F(3-1½)

ELEC 380 (1½) ELECTRONIC CIRCUITS: II

Power amplifiers. Linear and nonlinear distortion. High frequency models for transistors. Differential amplifiers. Operational amplifiers, their parameters and models. Negative feedback. Applications of operational amplifiers: instrumentation amplifiers, comparators, precision rectifiers. Oscillators and timers. Introduction to phase locked loops. Computer aided circuit analysis and design. (*Prerequisite:* 330) F(3-3)

ELEC 395 (formerly ENGR 395) (1) SEMINAR

The purpose of this course is to provide students with an opportunity to exercise their ability to present and to defend their thoughts on topics of their own choice. Students will be encouraged to devote some of their discussions to such topics as continuing professional education, professional societies, organization of engineering employment, and professional ethics. (*Prerequisite:* Completion of terms 1A to 2B) (Grading: COM, N or E) F(2-0)

ELEC 400 (1½) RANDOM SIGNALS

Review of random variables, moments and characteristic functions; random processes, noise model, stationarity, ergodicity, correlation and power spectrum, spectrum measurements; response of linear systems to random inputs, cross spectral densities, narrow band noise; introduction to discrete time and space processes, Markov chains and elementary queues. (*Prerequisites:* 310 and STAT 254) K(3-0)

ELEC 403 (1½) ENGINEERING DESIGN BY OPTIMIZATION

The steepest descent and Newton methods for unconstrained optimization. Golden section, quadratic and cubic line searches. Conjugate and Quasi-Newton methods for unconstrained minimization. The Fletcher-Reeves algorithm, and Fletcher algorithm with inexact line search. Application to the design of circuits, control systems, filters, mechanisms, and gear systems using optimization techniques. Introduction to constrained optimization and applications to the design of engineering systems. (*Prerequisites:* 360 or MECH 380, C SC 349A) K(3-0)

ELEC 404 (1½) MICROWAVE AND OPTICAL COMMUNICATIONS SYSTEMS: I

Plane waves, surface waves, wave impedance, surface impedance. Two wire, coaxial, and parallel plate transmission lines. Waveguide modes, cutoff frequency, dispersion, losses. Dielectric optical waveguides, surface waveguides microstrip. Principles of light transmission optics. Basic antenna theory, linear dipole, aperture, antennas, diffraction, linear arrays. (*Prerequisites:* 300, 310 and 340) K(3-1½)

ELEC 408 (1½) ANALOG FILTERS

Design of stable gain amplifiers, negative impedance converters and inverters, gyrators, generalized impedance converters and frequency dependent negative resistance elements for active filter applications. Solution of the approximation problem; Butterworth, Chebyshev, and elliptic approximations. Introduction to the design of LC equally terminated filters. Low sensitivity, active filter structures. Study of filter sensitivity with respect to element variations. Tuning. Computer aided analysis and design. (*Prerequisites:* 310 and 380) K(3-0)

ELEC 410 (1½) POWER ELECTRONICS

The application of electronics to energy conversion and control. Electrical thermal characteristics of power semiconductor devices: diodes, bipolar and field effect transistors, and thyristors. Magnetic circuits for energy conversion. Active and passive filtering techniques. Emphasis on device limitations, computer aided analysis and design and system control. Application samples including multipulse controlled rectifiers, high frequency induction heating, dc-dc conversion, cycloconverters, motor drives, and battery electronics. (*Prerequisites:* 370 and 380) K(3-1½)

ELEC 415 (1½) MICROELECTRONICS TECHNOLOGY

Alloyed contacts, diffusion techniques, diffusion theory, four point probe, ion implantation, epitaxial growth, silicon dioxide formation, photolithography, window opening, selected metallization, diode and transistor fabrication, junction depth determination, junction capacitance for general profile, fabrication of monolithic integrated circuits, isolation, junction capacitors, diffused resistors, mask making, device mounting, thin film passive components, thick film components, integrated circuit layout, MOS gate voltage, MOS integrated circuits. (*Prerequisite:* 320) K(3-1½)

ELEC 425 (1½) ROBOTICS: I

Structure and specification of robot manipulators; homogeneous transformations; kinematic equations and their solution; differential relationships, motion trajectories; dynamic models for robot manipulators. (*Prerequisites:* 360 and MECH 245) K(3-0)

ELEC 450 (1½) COMMUNICATION THEORY AND SYSTEMS: II

Transmission and filtering of random signals, analysis of modulation systems, in particular pulse code modulation, phase shift keying, frequency shift keying, etc., introduction to noise analysis, information theory and coding. (*Prerequisites:* 350 and 400) S(3-1½)

ELEC 454 (1½) MICROWAVE AND OPTICAL COMMUNICATIONS SYSTEMS: II

Circuit theory for waveguiding systems, waveguide discontinuities. Binomial and Chebyshev impedance transformer design. Electromagnetic resonators, the Fabry-Perot resonator. Periodic structures, microwave filters. Faraday rotation and ferrite devices. E.M. wave propagation in optically active media, electro-optic devices. Principles of microwave tubes. (*Prerequisite:* 404) S(3-1½)

ELEC 458 (1½) DIGITAL FILTERS

Introduction of the digital filter as a discrete time system. Discrete time transfer function. Time domain and frequency domain analysis. Structures for recursive and nonrecursive digital filters. Application of digital filters for the processing of continuous time signals. Solution of the approximation problem in recursive and nonrecursive filters. Quantization effects. (*Prerequisite:* 360) S(3-0)

ELEC 460 (1½) CONTROL THEORY AND SYSTEMS: II

Sampling in Control Systems. The z-transform and responses between sampling instants. Analysis of sampled data systems and stability testing. State-space analysis and design of continuous and discrete systems. Controllability, observability and zero input stability analysis. Pole placement techniques. (*Prerequisite:* 360) S(3-0)

ELEC 465 (1½) DESIGN OF VLSI SYSTEMS

A structured design methodology which enables a digital system designer to exploit the architectural possibilities of the silicon integrated circuit (IC) technology with only a relatively elementary knowledge of device physics or electronic circuit design. A large part of the course will be devoted to design projects leading to generated intermediate files for IC fabrication. (*Prerequisite:* CENG 440) S(3-3)

ELEC 470 (1½) ELECTRONIC DEVICES: II

Modes of operation, physical mechanisms, characteristics, and modelling of MOS transistors, Schottky junctions, tunnel diodes, photovoltaic solar cells, Gunn diodes, microwave bipolar transistors, GaAs field effect transistors, and other modern semiconductor devices. (*Prerequisite:* 320) S(3-1½)

ELEC 475 (1½) ROBOTICS: II

Dynamic models of robot manipulators; position and speed control. Programming for real time computation and control. Simplification of dynamic models, trajectory generation. Programming languages for robot manipulators. Interaction with the environment using sensors. (*Prerequisites:* 425, 460, which may be taken concurrently, and CENG 445) S(3-1½)

ELEC 485 (1½) PATTERN RECOGNITION

Parallel and sequential recognition methods. Bayesian decision procedures, perceptrons, statistical and syntactic approaches, recognition grammars. Feature extraction and selection, scene analysis, and optical character recognition. (*Prerequisite:* STAT 254) S(3-0)

ELEC 499 (1½) TECHNICAL PROJECT

The course provides an opportunity for each student to carry out a suitable engineering project under the supervision of a faculty member. Projects will involve design, implementation, and testing of hardware and/or software. Each student is expected to present oral and written reports. (*Prerequisite:* The student must be registered in term 4A or 4B) KS(0-6)

MECHANICAL ENGINEERING COURSES

MECH 220 (1½) MECHANICS OF SOLIDS: I

Review of bending moment and shear force diagrams for beams. Introduction of stress and strain; axial loading, torsion, pure bending and transverse loading. Stress and strain transformation in two dimensions. Mohr's circle. Beam deflection, stability of columns. (*Prerequisite:* MATH 200 which may be taken concurrently) K(3-3*-1)

* implies a 3 hour laboratory taken by students on alternate weeks.

MECH 240 (formerly MECH 340) (1½) THERMODYNAMICS

First law and second law analysis as applied to open and closed systems. The properties and behaviour of both ideal and real substances, with applications to the analysis and design of engineering systems. The importance of second law analysis with the concept of the exergy (ability to produce work) as distinct from "energy." (*Corequisite:* MATH 200) F(3-3*-1)

MECH 241 (1½) STATICS
Review of vector algebra. Forces, moments of forces, couples, resultants of force systems; distributed loads; hydrostatics; conditions of equilibrium and application to particles and rigid bodies; analysis of statically determinate structures including beams, trusses and arches; bending moment and shear force diagrams; dry friction problems; principles of virtual work; potential energy, stable and unstable equilibrium; hydrostatics. (*Prerequisite:* PHYS 120) F(3-0-1)

MECH 242 (1½) DYNAMICS
Cartesian, normal-tangential and polar components of velocity and acceleration, in two and three dimensions; rotating frames; force/acceleration, impulse/momentum; energy methods; conservative and non-conservative systems; systems of particles, systems of streams of particles and rigid bodies; introduction to three dimensional problems of particle and rigid body dynamics. (*Prerequisite:* PHYS 120 and 241 or 245) K(3-0-1)

MECH 245 (formerly ENGR 245) (1½) ENGINEERING FUNDAMENTALS: I
Resultant of force systems, equilibrium of particles and rigid bodies; centroids and centre of gravity, friction, virtual work and potential energy based methods; moments of inertia; kinematics of particles and rigid bodies; force and acceleration; work and energy; impulse and momentum for particles. (*Prerequisites:* PHYS 120 and MATH 200 which may be taken concurrently) F(3-0-1)

MECH 285 (formerly MECH 325) (1½) PROPERTIES OF ENGINEERING MATERIALS
Atomic structure, arrangement and movement; equilibrium microstructural development and heat treatment; physical properties of ferrous and nonferrous metals, ceramics, polymers and composites; corrosion and mechanical testing. (*Prerequisite:* CHEM 150, or 100 and 102, or 101 and 102, or 140 and 102) K(3-3*-1)

MECH 295 (formerly ENGR 270) (1½) ENGINEERING FUNDAMENTALS: II
Ideal gas laws; work and heat; conservation of energy; thermodynamic properties of pure substances; equations of state; applications to open and closed systems; second law of thermodynamics; non-conservation of entropy; energy conversion systems; heat transfer by conduction, convection and radiation. (*Prerequisites:* PHYS 125 and MATH 101) K(3-0)

MECH 320 (formerly MECH 280) (1½) MECHANICS OF SOLIDS: II
Theory of stress and infinitesimal strain in three dimensions, equilibrium equations, stress-strain-temperature relations for isotropic elastic solids, statically indeterminate structures. Castigliano's theorems, thick-walled cylinders and spherical shells, torsion of prismatic bars, curved beams, introduction to plate theory, limits of elasticity, creep. (*Prerequisite:* 220) S(3-3*-1)

MECH 330 (1½) MACHINE DYNAMICS
Balancing of rigid rotors; single plane and two-plane balancing, analytical and experimental field balancing methods. Balancing of reciprocating machines; single cylinder shaking forces, multicylinder engines and compressors of different configurations. Vibration of single-mass systems; free vibration characteristics, harmonic forcing, frequency response functions, applications to vibration isolation and transmissibility, shaft whirl, and vibration transducers. Fourier series solutions for periodic forcing. Multi-mass systems; frequencies and modes for undamped systems, matrix methods, orthogonality of modes and iteration methods. Beam and shaft vibration; Euler equation, frequencies and modes for classical boundary conditions, critical speeds of shafts. (*Prerequisite:* 242 or 245) F(3-3*-1)

MECH 335 (1½) THEORY OF MECHANISMS
Types of mechanisms. Analysis of the kinematics of closed loop linkages using graphical, vector and complex number methods. Follower motion synthesis and design of cam profiles. Gear terminology and the analysis of gear trains. Analysis of static and dynamic loading of mechanisms; flywheel design. Introduction to linkage synethsis, spatial open loop mechanisms with applications to manipulators. (*Prerequisite:* 242 or 245) S(3-1-1)

MECH 345 (1½) MECHANICS OF FLUIDS: I
Fluid properties. Fluid statics. Control volume approach; conservation of mass, momentum, and energy. Dimensional analysis. Flow in pipes. Flow measurement. Boundary layers. Turbomachinery. (*Prerequisite:* MATH 200) S(3-3*-1)

MECH 350 (formerly MECH 260) (1½) ENGINEERING DESIGN: I
Design methodology; recognizing and defining open ended engineering problems, generating creative solutions, modelling, analysis, synthesis, computing and testing. Students complete a series of design oriented projects in small teams. (*Prerequisite:* 220) S(2-2)

MECH 355 (1½) INTRODUCTION TO MICROPROCESSORS
Computer structure and organization; number systems and codes; assembler language; introduction to microprocessors and their application in instrumentation, manufacturing, control and automation. (*Prerequisite:* CSC 160) F(3-1)

MECH 360 (1½) ENGINEERING DESIGN: II
Design of mechanical components; shafts, gears, clutches, brakes, bearings, belts and chains and high pressure components; contact stresses, stress concentration, design for fatigue; hydrodynamic and boundary lubrication; design of fluid power circuits. (*Prerequisite:* 220) F(3-0-1)

MECH 380 (1½) AUTOMATIC CONTROL ENGINEERING
Representation of control systems, steady-stage operations. Laplace transformations, transient responses, stability. Frequency-response methods. Bode diagrams. Nyquist criterion, system compensation. (*Prerequisite:* 242 or 245) F(3-3*-1)

MECH 390 (1½) ENERGY CONVERSION SYSTEMS
Energy conversion systems: thermal power generation, heat pumps and refrigeration systems, internal combustion engines, fuel cells and solar technologies. Energy systems analysis, energy economics and energy modelling. (*Prerequisite:* 240) F(3-0)

MECH 395 (1½) HEAT AND MASS TRANSFER
Analytic and numerical analysis of steady and transient conduction in solids. Principles of convection and analyses of heat transfer under laminar and turbulent flow over flat plates and inside and over pipes. Thermal radiation physics and radiation between multiple black and gray surfaces. (*Prerequisites:* 240 and 345) F(3-3*-1)

MECH 400 (1½) DESIGN PROJECT
Complete design of a product or a system (related to elective option); specification of function, analysis, section of materials, strength calculations, preparation of working drawings, cost analysis and tenders. (*Prerequisite:* 360) K(1-0-3)

MECH 410 (1½) COMPUTER AIDED DESIGN
Basic elements of CAD and relevance to current industrial practice; computational geometry for design and 3-D geometry; methods for curve and surface fitting; input and output devices for computer graphics, passive as well as active; representation of physical surfaces and computer aided drafting; graphical programming languages; development of interactive 3-D computer graphics. (*Prerequisites:* ENGR 150, and MATH 133 and 200) K(3-1½)

MECH 411 (1½) ORGANIZATION OF THE PRODUCTION PROCESS
Organization of the production process; job, batch and man-manufacturing systems, factory planning, plant layout and work standards; inventory control; production schedules; production control; operations research; engineering economy. (*Prerequisite:* C SC 349A) K(3-0)

MECH 412 (1½) INDUSTRIAL ECONOMICS
Concepts of business and the economic feasibility of engineering undertakings, rate of return, payback period, replacement decisions, resource allocations, critical path analysis. (*Prerequisite:* C SC 349A) K(3-0)

MECH 420 (1½) FINITE ELEMENT APPLICATIONS
Formulation and application of the finite element method for modelling mechanical systems, including stress and vibration problems; stiffness method, stiffness and mass matrices, generalized force, numerical procedures; development of simple programs and exposure to general purpose packages. (*Prerequisites:* 320 and MATH 321) S(3-0)

MECH 430 (1½) ROBOTICS
Structure and specifications of robot manipulators; homogeneous transformations; kinematic equations and motion trajectories; dynamic models of robotic manipulators; position and force control; use of robots in industrial applications. (*Prerequisite:* 380) K(3-0)

MECH 440 (1½) INTRODUCTION TO WATER WAVE PHENOMENA
Basic equations and approximation; equations of motion and energy balance. Solution for "small" waves, including linear theory. Applications: waves on currents, ship waves, refraction problems. Other topics include: waves in shallow water, infinitely deep water, waves on beaches, hydraulic jumps. (*Prerequisite:* 345) K(3-0)

MECH 455 (1½) INSTRUMENTATION
Measuring fundamental properties: transducers for measuring position, velocity and acceleration, fluid flow, temperature, pressure. Initial signal conditioning and problems: noise, shielding, bridges, passive filtering. Operational amplifiers, integrators, differentiators. Analog to digital conversion and digital to analog conversion. Actuators for controlling position, velocity and acceleration. Microprocessor applications. (*Prerequisite:* ELEC 365) S(3-3*-1)

MECH 460 (1½) COMPUTER AIDED MANUFACTURE
Review of common manufacturing processes and the organization of the manufacturing unit; manufacturing processes aided by computers; numerically controlled machine tools; numerically controlled part programming; machining of doubly curved surfaces; computerized numerically controlled tools and adaptive control systems; industrial robots; application of CAD/CAM in engineering and medicine. (*Prerequisites:* 245 and 410) S(3-1½)

MECH 461 (1½) PLASTICITY AND MANUFACTURING PROCESSES
Plastic behaviour of materials, criteria of flow, extremum principles, slip line field solutions; application to drawing, extrusion, hot and cold rolling, forging, sheet metal forming and metal cutting; process design and control. (*Prerequisite:* 320) S(3-0)

MECH 462 (1½) SMALL BUSINESS ORGANIZATION
Finance, accounting, auditing, taxation, marketing, market research; organizational psychology, personnel selection; engineering economy, equivalent uniform annual cash flow, present worth, cost benefit ratio. (*Prerequisite:* ENGR 280) S(3-0)

MECH 470 (1½) APPLIED THEORY OF ELASTICITY
Review of analysis of stress and strain; constitutive relations for linear elasticity; two dimensional problems in rectangular coordinates and polar coordinates; general theorems; torsion; bending; thermal stress problems; energy methods. Problems in beam theory, beams on elastic foundation, some problems in elastic stability; introduction to plate theory; axially symmetric problems of cylindrical shells. (*Prerequisite:* 320) K(3-0)

MECH 480 (1½) ADVANCED CONTROL THEORY
State-space representation of dynamic systems, linear system dynamics, state transition matrices, canonical forms. Controllability and observability, shaping the dynamic response, linear observers. Compensator design, linear quadratic optimal control. (*Prerequisite:* 380) S(3-0)

MECH 485 (1½) MECHANISM AND MANIPULATOR SYNTHESIS
Synthesis of mechanisms for function generation and rigid body guidance. Graphical, analytical, and optimization based methods of synthesis. Mechanism cognates, Chebychev spacing, Burmister curves. Manipulator joint layout synthesis for spatial positioning and orientation. Application to serial, parallel and hybrid configurations. Conditions of singularity and uncertainty. Course involves computer and hardware based projects. (*Prerequisite:* 335) S(3-0)

MECH 490 (1½) UNDERWATER ACOUSTICS
General acoustical properties of oceans. Acoustical wave generation, transmission and reflection. Radiation of sound power, ray tracing and absorption. Acoustic signal data processing. Sonar systems and equations, transducer characteristics and arrays. Sea floor measurements and long distance sound propagation. (*Prerequisite:* 345) K(3-0)

MECH 491 (1½) WAVE FORCES ON OFFSHORE STRUCTURES
Review of the basic equations and concepts. Flow separation and time-dependent flows. Wave theories. Wave forces on small bodies — force coefficients. Marine risers. Wave impact loads. Wave forces on large bodies. (*Prerequisite:* 345) S(3-0)

MECH 492 (1½) MECHANICS OF FLUIDS: II
Differential analysis of fluid motion. Incompressible inviscid flow. Fluid flow about immersed bodies. Flow in open channels. Introduction of compressible flow: steady one-dimensional compressible flow. Turbo machinery. (*Prerequisite:* 345) K(3-3*-1)

MECH 499 (1½) TECHNICAL PROJECT
The technical project provides an opportunity for each student to carry out a design project associated with one or more of the higher level courses, under the supervision of a faculty member. The nature of the project selected should be such as to require independent study of current technical literature. When feasible, the design should be assessed in the laboratory. (Each student is to present a complete report at the end of the term.) (*Prerequisite:* The student must be registered in term 4A or 4B) KS(0-6)

FACULTY OF FINE ARTS

Anthony Welch, B.A. (Swarth.), M.A., Ph.D. (Harv.), Dean of the Faculty
Alan Hughes, B.A., M.A. (Tor.), Ph.D. (Birm.), Associate Dean
Mavor Moore, B.A. (Tor.), D.Litt. (York), Research Professor in Fine Arts
Audrey Forster, Adjunct Professor (1989-91)

The Faculty of Fine Arts comprises the Departments of Creative Writing, History in Art, Theatre, and Visual Arts and the School of Music, and offers courses leading to the degree of Bachelor of Arts, in Creative Writing, History in Art and Theatre; Bachelor of Music; Bachelor of Fine Arts, in Creative Writing, Theatre and Visual Arts.

Certain courses in the Faculty of Fine Arts carry unrestricted credit in the Faculty of Arts and Science, and other courses may be chosen in keeping with the free elective regulation of that Faculty.

Students in the Faculty of Education may register for credit in any course offered by the Faculty of Fine Arts, provided that space is available and that they have the prior approval of the Education Advising Centre.

Graduate work is offered in Music, History in Art, Theatre and Visual Arts. (See section of Calendar on Faculty of Graduate Studies for details of programs and degrees.)

Cooperative Education Program

Please refer to page 32 of the Calendar for a general description of Cooperative Education.

In the Faculty of Fine Arts, a Cooperative Education program is offered by the Department of Creative Writing. A similar option is offered by the Departments of History in Art, Music, Theatre and Visual Arts through the Arts Co-operative Education Program.

Admission to and completion of Cooperative Education Programs are governed by individual departmental requirements. As a required part of the program, students are employed for specific Work Terms, each with a minimum duration of 13 weeks. This employment is related as closely as possible to the student's course of studies and individual interest.

Students may withdraw from the Cooperative Education Program at any time and remain enrolled in a degree program offered by the Department.

Details of the program in the Department of Creative Writing are outlined on page 206 of the Calendar.

Details of the Arts Cooperative Education Program are outlined on page 204.

Qualifications for Admission

Applicants seeking admission to the Faculty of Fine Arts are governed by the regulations that appear on pages 7-12.

See additional requirements for Creative Writing, Music, Theatre and Visual Arts in the chart on page 8 and in the departmental entries.

Because of limited space and resources in some programs, not all qualified candidates can be admitted; early application is therefore highly desirable.

Students from other faculties should note that enrollment in certain courses may be limited and preference given to students registered in the Faculty of Fine Arts. Consult the department or school for specific information.

Second Bachelor's Degree

Students wishing to complete a second bachelor's degree should proceed as outlined on page 20.

General Regulations

Calendar regulations governing registration, fees, and academic advancement (see pages 15-20), apply to all students registered in the Faculty of Fine Arts. Special regulations are set out under the departmental entries.

Academic Advice

Students entering the Faculty for the first time should consult departmental offices for advice about course planning. If possible, this should be done before registration.

All students in the Faculty of Fine Arts are required to complete a Record of Degree Program form in consultation with their department/school preferably near the beginning of their third year of studies. The purpose of this form is to ensure that proposed courses will meet the requirements for the degree program selected. A copy of this form is placed on file in the Records Office to be used as a record for graduating purposes.

All students registered in the Faculty of Fine Arts who intend eventually to enter the teaching profession should notice the admission requirements of the programs of the Faculty of Education. These requirements must be kept in mind in the choice of academic electives in all undergraduate degree programs.

Questions about academic planning in Fine Arts that do not relate to any specific departmental program can be referred to the Dean's Office in Room 192, MacLaurin Building.

Degree Requirements in the Faculty of Fine Arts

Each candidate for a bachelor's degree is required:

(a) to have satisfied the University English requirement (see page 13);
(b) to present credit in a minimum of 60 units of university level courses numbered 100 and above; at least 30 of these 60 units must normally be University of Victoria courses;
(c) to include in these 60 units a minimum of 21 units of courses numbered at the 300 and 400 level; at least 18 of the 21 upper level units should normally be University of Victoria courses;
(d) to meet the specific program requirements prescribed by the Faculty for the student's declared degree program (see department/school for specifics).

Interdepartmental Double Honours or Major

A student in one department in the Faculty of Fine Arts may concurrently satisfy the requirements of a program in a second department by completing the program requirements in the second area with the permission of both departments. Only one degree will be awarded. For example, a student majoring in History in Art may concurrently satisfy the requirements for the program in Visual Arts and thereby qualify for a B.A. with a Double Major in History in Art and Visual Arts. Conversely, a student majoring in Visual Arts may concurrently satisfy the requirements for the program in History in Art and thereby qualify for a B.F.A. with a Double Major in Visual Arts and History in Art. Students interested in taking a double honours or major program should consult the departments concerned.

In any case where two different classes of degree result, each class shall be tied to the respective discipline instead of the degree, and shall be shown in the student's academic record.

Interfaculty Programs:

Students may arrange for an Interfaculty Double Honours or Major program through the Arts and Science Advising Centre. Such programs involve satisfying the Honours or Major requirements of two disciplines in two different Faculties. Agreement to details of all such programs must be signed by the students and by representatives of the academic units involved. Students on the interfaculty program will be subject to the regulations of the Faculty in which they are registered.

Only one B.A. degree with a Double Major, a Double Honours or a Joint Major/Honours will be awarded on the recommendation of the Faculty in which the student is registered.

Students in a Major or Honours Program may also arrange to undertake a Minor in the Faculty of Arts and Science (see Minor, page 37). Particular attention is drawn to the Medieval Studies Program (see page 118) and to the Women's Studies Program in that Faculty (see page 150).

In any case where two different classes of degree result, each class shall be tied to the respective discipline instead of the degree, and shall be shown in the student's academic record.

Credit for Studies Taken at Other Postsecondary Institutions

Students who plan to undertake work at other institutions must receive prior approval from the Dean if they wish such courses to be credited towards a degree program in the Faculty of Fine Arts. This applies particularly to courses at the 300 and 400 level and to courses which are included in the last 15 units of a degree program. Upon successful completion of such work, the student must request the Registrar of the

other institution to send an official transcript of record to Records Services of the University of Victoria.

Students authorized to attend another institution who accept a degree from that institution abrogate their right to a University of Victoria degree until they have satisfied the University's requirements for a second bachelor's degree.

Pre-Architecture Planning

Since Canadian Architectural programs vary widely in their prerequisites for admission, undergraduates interested in future careers in architecture, urban planning, or landscape architecture are urged to write for this essential information to the School of Architecture they are interested in entering.

Generally, all programs emphasize the need for balance and diversification of academic background and for competence in English, Mathematics, and Physics; some programs require a portfolio of graphic work to demonstrate ability.

For advice on course selection, those students planning an architectural degree should consult the Associate Dean, Faculty of Fine Arts, or the Advising Centre, Faculty of Arts and Science.

INTERDISCIPLINARY COURSES

(Course offering codes: Y = Sept.-Apr., F = Sept.-Dec., S = Jan.-Apr., K = May-Aug., NO = Not offered, this session)

FA 290 (1½ or 3) FINE ARTS STUDIES OFF CAMPUS
An intensive introductory course in the artistic activities or heritage of one city or region. To be offered in the appropriate location during the Summer Studies period; this course will be sponsored by one or more academic units in the Faculty of Fine Arts and will be under the supervision of a faculty member from the Department/School or Departments concerned. The course may be taken for credit more than once as the content and locale will vary from year to year. (*Prerequisite:* Permission of the Course Director) NO

FA 300 (1½ or3) INTERDISCIPLINARY SEMINAR
A seminar and studio course emphasizing an interdisciplinary approach to contemporary artistic concerns. In each year, course work will focus on a particular issue which can be explored from the distinctive points of view of the various artistic disciplines and can be used as the theme for participatory creative projects. Issues and themes may include the following: performance as interdisciplinary focus; technological explorations in contemporary art; art and the environment; the arts, popular culture, and mass media; chance procedures — aleatory methods in creative disciplines. Students may take this course for credit more than once in different topics. (*Prerequisite:* At least second year standing in the Faculty of Fine Arts) NO

FA 315 (1½) CANADIAN CULTURAL POLICY
An examination of Canadian cultural policy since the 1940s with emphasis on its relationship to Canadian national identity. Topics to be considered include the controversial role of governments in pursuit of cultural policies, the significance of Federal granting councils, the changing nature of corporate patronage, and the economic impact of the arts.
M. Moore (3-0)

FA 325 (1½ or 3) ISSUES IN CONTEMPORARY CANADIAN CULTURE
An interdisciplinary course focussed on creative writing, film, history in art, music, theatre, visual arts, and cultural policies in 20th century Canada.
J. Backus (3-0)

FA 335 (1½ or 3) POPULAR CULTURE
An interdisciplinary examination of the popular arts and their place in society. The topics for examination will vary in different years and sections. Students may take this course for credit more than once, in different topics. (*Prerequisite:* At least second year standing) NO

FA 345 (1½) THE ARTS AND TECHNOLOGY: I
A practical study of the application of contemporary technology to the arts. The topics for consideration may vary in different years and sections. Students may take this course for credit more than once, in different topics. (*Prerequisite:* At least second year standing. Additional prerequisites may be required for some topics) NO

FA 346 (1½) THE ARTS AND TECHNOLOGY: II
A practical study of the application of contemporary technology to the arts. The topics for consideration may vary in different years and sections. Students may take this course for credit more than once, in different topics. (*Prerequisite:* At least second year standing. Additional prerequisites may be required for some topics) NO

FA 355 (1½ or 3) SEMINAR IN ARTS MANAGEMENT
An introduction to selected key aspects of management, promotion and funding of arts organizations. The topics for consideration may vary in different years and sections. Students may take this course for credit more than once in different topics. (*Prerequisite:* At least second year standing in Fine Arts)
C. Stout (2-2)

FA 360 (1½ or 3) INTRODUCTION TO ISSUES IN ARTS CRITICISM
An introduction to selected methods and major issues in the history and practice of criticism focusing on one or more media, such as architecture, dance, film, music, theatre, and visual arts. Topics examined may include the historic and modern aims of the critic, social roles of the critic, different critical methodologies, problems in critical interpretation, and techniques of critical writing. Depending on content, this course may be taken more than once. (*Prerequisite:* Permission of the Dean or designate)
M. Moore (3-0)

FA 365 (1½ or 3) DANCE WORKSHOP: I
An intensive practical introduction to the techniques of a specific style of dance. The style of dance to be introduced may vary in different terms and sections. Students may take this course for credit more than once, in different styles. (*Prerequisite:* Previous experience in dance, and the permission of the instructor, or THEA 260) NO

FA 366 (1½ or 3) DANCE WORKSHOP: II
An intensive practical introduction to the techniques of a specific style of dance. The style of dance to be introduced may vary in different terms and sections. Students may take this course for credit more than once, in different styles. (*Prerequisite:* Previous experience in dance, and the permission of the instructor, or THEA 260) NO

FA 390 (1½ or 3) FINE ARTS STUDIES OFF CAMPUS
An intensive advanced course in the artistic activities or heritage of one city or region. To be offered in the appropriate location during the Summer Studies period; this course will be sponsored by one or more academic units in the Faculty of Fine Arts and will be under the supervision of a faculty member from the Department/School or Departments concerned. The course may be taken for credit more than once as the content and locale will vary from year to year. (*Prerequisite:* To be specified as required from year to year or permission of the Course Director) NO

ARTS COOPERATIVE EDUCATION PROGRAM

The Arts Co-operative Education Program is a year-round program which, through work terms of employment in a variety of organizations, enables students to combine work experience with an education in the fine arts and humanities.

To qualify for admission into the Arts Coop Program, a student must be proceeding to an Honours or Major B.A., B.F.A. (other than Creative Writing) or B.Mus. degree in the Faculty of Fine Arts. In addition, a student must be registered in at least fifteen units of course work and

must have achieved at least a 5.50 Grade Point Average in first year. A formal interview to determine the student's interests, abilities and aptitudes will be required before admission.

To continue in the program, a student must be a full time student enrolled in a program leading to an Honours or Major B.A. or B.F.A. degree as listed in the previous paragraph, and must maintain a G.P.A. of at least 5.50 in the courses in the major area, and at least a 5.00 average overall.

To receive the Coop notation on graduation, a student must complete at least 15 units of approved Arts Coop courses (see below), must complete satisfactorily the Work Term Preparation Seminar prior to the first Work Term, and must perform satisfactorily in each of at least four Work Terms. Details of Work Terms are recorded on the Record of Work Terms which is attached to the student's academic record and transcript.

The Arts Coop Program is designed to provide students with an academic background and certain skills appropriate to a wide range of careers. In particular, students will be required to select a program of studies intended to ensure that they

- are capable of clear and precise oral and written communication in English
- acquire some understanding of management practice and the Canadian financial system
- are aware of the Canadian historical and political context
- are aware of the social impact of science and technology, with particular emphasis on computing.

A student's selection of Arts Coop courses will be approved by both the Arts Coop Coordinator and the responsible Departmental Adviser.

COURSES

Students must complete a minimum of 15 units, in addition to the requirements for the Major or Honours program. Nine units will be selected from the following list, and should be completed by the end of third year:

CSC	100	(1½)	Elementary Computing
ECON	100	(1½)	The Canadian Economy - Problems and Policies
CW	100	(3)	Introduction to Creative Writing
FA	315	(1½)	Canadian Cultural Policy
HIST	130	(3)	History of Canada
PHIL	201	(1½)	Applied Logic: I
or			
PHIL	203	(1½)	Applied Logic: II
PHIL	220	(1½)	Introduction to Philosophy of Science
POLI	470	(3)	Government in Canada

Other relevant training and experience may be considered at the time of admission to assist students with the selection of the remaining 6 units.

Applications and further information about the Arts Co-operative Education Program may be obtained from the Arts Co-op Co-ordinator in the Office of Co-operative Education Programs (Room 110, Campus Services Building).

DIPLOMA IN FINE ARTS

The Diploma Program in Fine Arts is designed for members of the community who must balance academic study with jobs, families, or community responsibilites. It is open to any member of the community with a commitment to University level study. Applicants should normally have completed an undergraduate degree.

The Program is not appropriate for those wishing an emphasis on studio or performance areas. Rather, it stresses intellectual values of the creative and liberal arts. It is an innovative, interdisciplinary program that is unique in Canada.

The Fine Arts Diploma Program is an extension program of the Faculty of Fine Arts, and completion of the program will lead to a Diploma in Fine Arts awarded under the authority of the Senate of the University of Victoria. The Program offers participants the choice of eleven different themes of study:

1) The Idea of the Fine Arts
2) History of the Fine Arts
3) World Architecture
4) The Middle Ages
5) Renaissance and Baroque
6) Modernism
7) Canada
8) The Mediterranean
9) Asia and the Pacific Rim
10) Cross Cultural Studies in Ancient Arts
11) Individual Study Program

Each of these themes requires the completion of 18 units of course credits on a full or part time basis, normally within five years.

For further information about the Program and for academic planning, please contact the Associate Dean of Fine Arts.

DEPARTMENT OF CREATIVE WRITING

Lawrence W. Russell, B.A. (U. of Vic.), M.A. (Calif.), Professor and Chair of the Department
W. David Godfrey, B.C. (Iowa), M.A. (Stan.), Ph.D. (Iowa), Professor
Jack Hodgins, B.Ed. (Brit. Col.), Professor
Robin Skelton, B.A., M.A. (Leeds), F.R.S.L., Professor
William D. Valgardson, B.A., B.Ed. (Man.), M.F.A. (Iowa), Professor
Derk Wynand, B.A., M.A. (Brit. Col.), Professor
Donald F. Bailey, B.A. (New Br.), M.Ed. (Brit.Col.), Cooperative Education Coordinator

Visiting and Adjunct Appointments:

Peter C. Newman, B.A., M.Com. (Tor.), D. Litt. (York), LL.D. (Brock), LL.D. (W. Laur.), LL.D. (Queen's), LL.D. (R.M.C.), Adjunct Professor (1990-92)
Phyllis Webb, B.A. (Brit. Col.), Adjunct Professor (1989-91)
Jeanette C. Armstrong, B.F.A. (U. of Vic.), Adjunct Lecturer - En'owkin Project (1990-91)
Joyce Brenda Joe, B.A. (U. of Vic.), M.F.A. (Brit. Col.) Visiting Lecturer - En'owkin Project (1990-92)
Charles L. Tidler, B.A. (Purdue), Visiting Lecturer (1990-91)

Foreign writers who have recently taught for the department have included John McGahern (Ireland), Heidi von Born (Sweden), Rod Jones (Australia) and Bodvar Gudmundsson (Iceland).

GRADUATE PROGRAM

At this time, the Department does not offer a graduate program.

MAJOR PROGRAM

Drama, Fiction, Nonfiction, Poetry:
Students with credit for Creative Writing 100 will be required to take: 6 units of 200 level Creative Writing, including 3 units from 201, 202 and 203; 15 units of 300/400 level Creative Writing, including at least 3 units from 303A/B, 304A/B, 305A/B, 316A/B, and at least 3 units from 401A/B, 402A/B, 403A/B, 416A/B.

All students are advised to work toward a double major, since failure to achieve at least a B- in a workshop will normally lead to their being unable to complete a degree in Creative Writing. Without a concentration of courses in a separate discipline, this may lead to a delay in graduating.

If at least 9 units of electives are chosen from courses offered by other Departments within the Faculty of Fine Arts, the degree awarded may be either the B.F.A. or the B.A. of the Faculty of Fine Arts. If fewer than nine units of electives from the Faculty of Fine Arts are chosen, then the degree awarded will be the B.A. of the Faculty of Fine Arts.

Interfaculty Double Major

A Fine Arts student majoring in Creative Writing may concurrently satisfy the requirements for the Major program of a Department in the Faculty of Arts and Science. Conversely, a student pursuing a Major program for the B.A. degree within the Faculty of Arts and Science may concurrently satisfy the requirements for the Major program of the Department of Creative Writing as approved for the Faculty of Fine Arts. Only one B.A. degree with a Double Major will be awarded on the recommendation of the Faculty in which the student is registered.

ADMISSION REQUIREMENTS AND ADVICE FOR STUDENTS ENTERING THE DEPARTMENT FOR THE FIRST TIME

1. Applicants from Secondary School

Students must apply to the Admissions Office for acceptance to the University. Entrance to Creative Writing 100 and 101 will normally be restricted. Students taking ENGL 099 may not take the courses. In normal circumstances, Creative Writing 100 or 101 is prerequisite to all Creative Writing workshops.

2. Applicants from other Universities and Colleges

Students who satisfy the Department's standard by either the production of written work or the passing of courses in Creative Writing at other institutions, may be given permission to enter a Creative Writing Major program at an appropriate level. Only portfolios received between January 15 and March 15 each year will be considered.

3. Applicants with Existing Degrees

Each year, a limited number of students are permitted to enter the program to work towards a second degree, B.F.A. or B.A. A minimum of two years of further study is required. Applicants who cannot produce a manuscript of sufficient quality to allow them entry into a third year workshop may require three or four years to complete their program. (See page 20, A Second Bachelor's Degree.) Only portfolios received between January 15 and March 15 each year will be considered.

ADMISSION TO SPECIFIC COURSES

Although the programs offered by the Creative Writing Department are intended, in the main, to serve those students who have shown some ability as writers, a number of lecture courses are also included which may be of interest and value to non-Creative Writing students. The only entrance restriction to third year lecture courses (307-314 and 318) is second year standing. 405 and 406 require third year standing.

Only students majoring in Creative Writing or those whose declared 'first area of study' is Creative Writing will be allowed to register during early registration. All others must wait until September.

Second, Third and Fourth year workshops:

Students may not register for a Creative Writing workshop unless they have a grade of B- or higher in the appropriate prerequisite.

No student will be permitted to take more than 6 units of workshops (poetry, fiction, nonfiction, drama) in any given year. Special and Directed Studies courses are designed for those teaching situations which cannot be covered in regular workshops. No writing projects which might be covered in a regular workshop will be permitted within such special courses.

Subject to the regulations relating to prerequisites, courses in the Creative Writing Program are open to any student who satisfies the Department as to ability, regardless of the faculty in which the student is registered. Preference, however, will be given to students majoring in Creative Writing and those whose 'first area of study' is Creative Writing.

CREATIVE WRITING COOPERATIVE EDUCATION PROGRAM

The Cooperative Education Programs in the Faculty of Fine Arts are described on page 203. Additional general regulations pertaining to Cooperative Education Programs of the University of Victoria are found on page 32.

The Creative Writing Cooperative Program is open to students who are undertaking a program that is acceptable to the Department of Creative Writing and who are working toward a career in writing, publishing or communications. In general, an acceptable program will be a Major in Creative Writing or a Major or Honours program in an appropriate discipline (such as English, History, History in Art, Political Science, Computer Science, Philosophy, Theatre) which will include at least nine units of upper level courses in Creative Writing as electives.

Before final acceptance into the program, usually at the end of the second year, students must have taken either 101, or both 100 and PHIL 201; both 205 and 206 or one of 205/206 and one of 201/202/203 (for which 100 is a prerequisite); 317; 404A; and 6 units from ENGL 121, ENGL 122, ENGL 225, POLI 100, HIST 130, and must have permission of the Creative Writing Department and of the department offering their Major or Honours program if that is not Creative Writing.

Before the first work term, students must have completed 205 or 206 with a grade of B+ or higher. Students are required to maintain a B average and to complete satisfactorily four work terms.

The work terms are arranged by the Department of Creative Writing and are designed to combine practical work experience with the theoretical content of course study, with evaluation by both the employer and a faculty supervisor.

Students in the Cooperative Program may withdraw from the program at any time in order to graduate in a regular program.

Students in Cooperative Education must carry a full course load during each study term.

Students are advised that a Cooperative Education fee will be charged.

Further information concerning the Creative Writing Cooperative Education program may be obtained from the Coop Coordinator.

CERTIFICATE PROGRAM IN NATIVE INDIAN CREATIVE WRITING

In cooperation with the En'owkin International School of Writing in Penticton, B.C. (En'owkin Centre, 257 Brunswick St., Penticton, B.C. V2A 5P9), the department offers a Certificate in Native Indian Creative Writing. The entrance requirements and curriculum for this program are identical to those at the University of Victoria, but **this Certificate is only available for students who complete these requirements at the En'owkin International School.** Creative Writing courses at En'owkin will meet the same academic standards as at the University of Victoria but will emphasize Native writing and cultural content.

Students will have to complete their secondary school graduation and must meet the stated entrance requirements of the Faculty of Fine Arts of the University of Victoria. Mature students will be counselled according to their specific needs.

The Certificate program is designed primarily for mature students of Native Indian ancestry who wish to develop specialized skills in creative writing in a Native People's context. Candidates must have sought and obtained admission to the University of Victoria. Students may complete the program on a part-time basis but must complete successfully at least 24 units of course work over a period of two to six years. Credit obtained within the Certificate Program in Native Indian Creative Writing may be transferable to a regular University of Victoria degree program. Such transferability of credit is, however, subject to the specific requirements of the degree program.

Students wishing further details about admission to the Certificate and course requirements should write directly to the Director, Certificate Program in Native Indian Creative Writing, En'owkin International School of Writing, 257 Brunswick St., Penticton, B.C. V2A 5 P9. Students who subsequently wish to pursue a B.A. or B.F.A. in Creative Writing at the University of Victoria must fulfill the normal requirements for an undergraduate degree. It is strongly advised that any such students consult the chair of the Department of Creative Writing as early as possible.

COURSES

(Course offering codes: Y = Sept.-Apr., F = Sept.-Dec., S = Jan.-Apr., K = May-Aug., NO = Not offered, this session)

Students are cautioned to read the statements included in "Limitations of Enrollment" on page 7 of this Calendar.

FIRST YEAR

***C W 100 (3) INTRODUCTION TO CREATIVE WRITING**
This course consists of weekly lectures that will present a nonhistorical survey of some of the basic structures in poetry, drama and fiction and will involve the students in the writing and criticism of compositions in all three genres. (*Prerequisite:* Satisfactory standing in the Language Proficiency Index or successful completion of ENGL 099) Texts: To be announced. Y(3-0)

***CW 101 (3) BASICS OF PRACTICAL WRITING**
This lecture/lab will instruct students in the fundamentals of logic, grammar and punctuation, style, copyright and libel law, and computing skills for writers, such as word-processing and typesetting. (Enrollment is limited to first or second year standing.) (Students are reminded that this is a prerequisite course for the Creative Writing Cooperative Education Program) (*Corequisite:* at least 4½ units from ENGL 121, 122, 225, POLI 100, HIST 130) Y(3-1)

SECOND YEAR

***C W 200 (3) THE THEORY AND PRACTICE OF LITERARY CREATION**
This is a lecture course surveying the nature of the creative process and considering the many theories about it. NO(3-0)

***C W 201 (3) POETRY WORKSHOP**
A workshop seminar in which the students are instructed and guided in the writing of poetry. (*Prerequisites:* 100 with a grade of B- or higher, or equivalent)
D. Wynand Y(0-3)

***C W 202 (3) FICTION WORKSHOP**
A workshop seminar in which the students are instructed and guided in the writing of fiction. (*Prerequisite:* 100 with a grade of B- or higher, or equivalent)
D. Bailey, W.D. Valgardson Y(0-3)

***C W 203 (3) DRAMA WORKSHOP**
A workshop seminar in which the students are instructed and guided in the writing of drama for stage, radio, film, and television. (*Prerequisites:* 100 with a grade of B- or higher, or equivalent) Y(0-3)

***C W 205 (3) INTRODUCTION TO JOURNALISM**
This course deals with the methods of gathering news stories and of organizing the material for writing. The writing portion of the course covers the principles of the major varieties of newspaper and magazine writing including text processing. The mechanical and editorial aspects of newspaper production as they relate to the handling of news copy, and a historical, political and economic introduction to Canadian newspapers, magazines, journals, and owners, will be covered through lectures. (*Prerequisites:* Either 101, or both 100 and PHIL 201 with a grade of B- or higher. *Corequisite:* One of 201, 202, 203, 206) Y(3-1)

***C W 206 (3) PUBLISHING PROCEDURES AND PRACTICES**
This lecture course, with computer based labs, will instruct students in fundamental editorial skills which will be of use in newspaper, magazine, book or electronic publishing. Topics covered will include: language skills, style manuals, text processing, editorial roles in the publishing process, history of printing, publishing infrastructure organizations, principles of layout, distribution, costing and contract law. (Not open to students with credit in 306 from 1985-86 or earlier) (*Prerequisites:* Either 101, or both 100 and PHIL 201, with a grade of B- or higher. (*Corequisite:* One of 201, 202, 203, 205)
W.D. Godfrey NO(2-1)

THIRD YEAR

***C W 303A (1½) POETRY WORKSHOP: I**
(*Prerequisite:* 201 with a grade of B- or higher, or equivalent)
R. Skelton FS(0-3)

***C W 303B (1½) POETRY WORKSHOP: II**
(*Prerequisite:* 303A with a grade of B- or higher, or equivalent)
R. Skelton FS(0-3)

***C W 304A (1½) FICTION WORKSHOP: I**
(*Prerequisite:* 202 with a grade of B- or higher, or equivalent)
J. Hodgins, W.D. Godfrey FS(0-3)

***C W 304B (1½) FICTION WORKSHOP: II**
(*Prerequisites:* 304A with a grade of B- or higher, or equivalent)
J. Hodgins, W.D. Godfrey FS(0-3)

***C W 305A (1½) DRAMA WORKSHOP: I**
A workshop seminar in which the students are instructed and guided in the writing of drama for stage, radio, film and television. (*Prerequisite:* 203 with a grade of B- or higher, or equivalent)
C. Tidler FS(0-3)

***C W 305B (1½) DRAMA WORKSHOP: II**
A workshop seminar in which the students are instructed and guided in the writing of drama for stage, radio, film and television. (*Prerequisites:* 305A with a grade of B- or higher, or equivalent)
C. Tidler FS(0-3)

***C W 306A (1½) PUBLISHING PROCEDURES**
This seminar will deal with the process of conceptual editing, the creation and evaluation of manuscripts and proposals for the publishing industry. Students will be expected to prepare at least one major project which will be evaluated in line with current publishing practices. The impact of design, marketing and production on the generation, evaluation and reformulation process will be introduced. (*Prerequisites:* 206)
R. Skelton S(0-3)

***C W 306B (1½) SEMINAR IN PUBLISHING PROCEDURES**
This seminar will deal with the practice and theory of electronic publishing and editing in the 1980's, including: videotext, teletext, databases, font design, networks and on line training. (*Prerequisites:* 206)
W.D. Godfrey FS(2-1)

***C W 307 (1½) BASIC FORMS AND TECHNIQUES IN POETRY**
A lecture course surveying the structural composition and the functions of techniques in a representative group of poems. Aspects of poetics discussed will include prosody, diction, imagery, abstract form and sound patterns. (*Prerequisite:* Second year standing) NO(3-0)

***C W 308 (1½) ADVANCED FORMS AND TECHNIQUES IN POETRY**
A lecture course surveying advanced techniques and sophisticated formal structures in poetry. Discussed will be such topics as the vilanelle, sestina, canzone, ballade, rondeau, Projective Verse and Composition by Field. (*Prerequisite:* 307)
R. Skelton F(3-0)

***C W 309 (1½) BASIC FORMS AND TECHNIQUES IN NARRATIVE**
A lecture course surveying the structural composition and the function of techniques in a representative group of narrative prose works. Aspects of narrative discussed will include: theme, point of view, dialogue, scenic structure, role of narrator, metaphor, diction, plot and dialogue. (*Prerequisite:* Second year standing)
J. Hodgins F(3-0)

***C W 310 (1½) ADVANCED FORMS AND TECHNIQUES IN NARRATIVE**
This seminar will examine advanced and unusual forms and techniques in narrative. (*Prerequisite:* 309)
J. Hodgins S(3-0)

***C W 311 (1½) STRUCTURE IN STAGE DRAMA**
A lecture course surveying the structural characteristics of stage drama. (*Prerequisite:* Second year standing)
L. Russell F(3-0)

***C W 312 (1½) STRUCTURE IN CINEMA AND TELEVISION DRAMA**
A lecture course surveying the structural characteristics of screen drama, making use of published film and television plays, and of actual films. (*Prerequisite:* Second year standing)
L. Russell S(3-0)

***C W 313 (1½) RECURRENT THEMES IN LITERATURE**
A lecture course surveying recurrent themes in English Literature and in other literatures in translation. (This course may be taken for credit more than once in different topics with permission of the Department.) (*Prerequisite:* Second year standing)
W.D. Valgardson F(3-0)

***C W 314 (1½) CHANGING PERSPECTIVES IN LITERATURE**
A lecture course surveying the different ways in which writers have tackled similar subject matter, taking its material from English literature and other literature in translation. (*Prerequisite:* Second year standing)
W.D. Valgardson S(3-0)

***C W 315A (1½) SEMINAR IN JOURNALISM**
After a brief refresher program in general news reporting, students will be introduced to more specialized aspects of news reporting, including municipal affairs, cultural events, court and business reporting. Students will be encouraged to initiate investigative projects and to generate their own story and feature ideas. Emphasis will be placed on written assignments, awareness of sources and basic background, and the economics and history of newspapers and magazines in Canada. (*Prerequisites:* 205 with a grade of B- or higher, or equivalent)
J.E. Lee F(0-3)

***C W 315B (1½) FEATURE ARTICLE WRITING**
A seminar in which the students are instructed and guided in the writing of full length feature articles. (*Prerequisites:* 6 units from 205, 206, and/or any 200 level workshop, with a grade of B- or higher) S(0-3)

C W 316A (1½) NONFICTION WORKSHOP: I
A workshop seminar in which the students are instructed and guided in the writing of major nonfiction forms, such as biography, travel, history, social analysis. (*Prerequisites:* 6 units of 200 level C.W., including 205 or 206 or any second year workshop, with a grade of B- or higher)
FS(0-3)

C W 316B (1½) NONFICTION WORKSHOP: II
A workshop seminar in which the students are instructed and guided in the writing of major nonfiction forms, such as biography, travel, history, social analysis. (*Prerequisites:* 316A with a grade of B- or higher)
FS(0-3)

***C W 317 (1½) THE MEDIUM OF PRINT**
This workshop seminar is designed to make writing and journalism students thoroughly familiar with the medium of print; typesetting, design, layout, and binding. Students will be introduced to the major traditional lead fonts, mechanistic methods of typesetting, and the contemporary electronic methods of typesetting and layout. Design and layout will be covered from an aesthetic and practical point of view, with sufficient introduction to modern printing methods (offset, sheet feed and web) to allow the students to see some of the mechanical restrictions on design and layout. The use of photographs and the preparation of material for four colour work will also be covered. Texts will deal with both the history of this area and current innovations. (*Prerequisite:* Either 101, or both 100 and PHIL 201 *Corequisites:* 6 units of 200 level C.W., including one of 205 or 206) FS(2-1)

***C W 318A (1½) MULTIMEDIA**
A seminar on the artistic uses of various media: radio, film and television. (Not open to students with credit for 212) (*Prerequisite:* Second year standing) NO(3-0)

***C W 318B (1½) MULTIMEDIA**
A seminar on the artistic uses of various media: radio, film and television. (Not open to students with credit for 212) (*Prerequisite:* Second year standing) NO(3-0)

***C W 390 (3) DIRECTED STUDIES IN CREATIVE WRITING**
Under the supervision of a staff member and with the approval of the Chair of the Department. (*Prerequisites:* 9 units in Creative Writing and permission of the instructor)

***C W 391 (1½) DIRECTED STUDIES IN CREATIVE WRITING**
Under the supervision of a faculty member and with the approval of the Chair of the Department. (*Prerequisites:* 9 units in Creative Writing and the permission of the instructor)

FOURTH YEAR

***C W 401A (1½) ADVANCED POETRY WORKSHOP: I**
(*Prerequisites:* 303B with a grade of B- or higher, or equivalent)
D. Wynand FS(0-3)

***C W 401B (1½) ADVANCED POETRY WORKSHOP: II**
(*Prerequisites:* 401A with a grade of B- or higher, or equivalent)
D. Wynand FS(0-3)

***C W 402A (1½) ADVANCED FICTION WORKSHOP: I**
(*Prerequisites:* 304B with a grade of B- or higher, or equivalent)
W.D. Valgardson FS(0-3)

***C W 402B (1½) ADVANCED FICTION WORKSHOP: II**
(*Prerequisites:* 402A with a grade of B- or higher, or equivalent)
W.D. Valgardson FS(0-3)

***C W 403A (1½) ADVANCED DRAMA WORKSHOP: I**
A workshop seminar in which the students are instructed and guided in the writing of drama for stage, radio, film and television. (*Prerequisites:* 305B with a grade of B- or higher, or equivalent)
L. Russell FS(0-3)

***C W 403B (1½) ADVANCED DRAMA WORKSHOP: II**
A workshop seminar in which the students are instructed and guided in the writing of drama for stage, radio, film and television. (*Prerequisite:* 403A with a grade of B- or higher, or equivalent)
L. Russell FS(0-3)

***C W 404A (1½) INTRODUCTION TO PHOTOJOURNALISM**
This introduction to photojournalism emphasizes the basic aspects of black and white photography for publication, and surveys the development of photojournalism since 1839. Camera handling, exposure, lighting, film developing and printing will be covered. (Students must have a 35mm camera with light meter and they must spend about $45 on film and printing paper. Darkroom facilities are provided by the department.) (Evaluation will be on the basis of projects.) (*Prerequisite:* Either 101 or both 100 and PHIL 201 *Corequisites:* 6 units of 200 level C.W., including one of 205 or 206)
T. Gore FS(0-3)

***C W 404B (1½) INTERMEDIATE PHOTOJOURNALISM**
This course assumes the student is familiar with the basic techniques of black and white photography and processing. It deals with advanced topics including the sequencing of photographs, photography for publication, and advanced camera and darkroom techniques. It also examines the work of the major photojournalists in a historic context, emphasizing the development of individual style and personal statement in recent years. (Students must have a 35 mm camera with light meter and flash and they must spend about $45 on film and printing paper. Darkroom facilities are provided by the department.) (Evaluation will be on the basis of projects.) (*Prerequisites:* 404A and permission of the Department) (Preference will be given to C.W. Coop students.)
NO(0-3)

***C W 404C (1½) ADVANCED TOPICS IN PHOTOJOURNALISM**
A workshop seminar which deals with further aspects of documentary photography including portraiture and studio lighting, large cameras and lenses. (Students must have a 35mm camera with light meter and flash and they must spend about $50 on film and printing paper. Darkroom facilities are provided by the department.) (Evaluation will be on the basis of projects.) (*Prerequisites:* 404B and permission of the Department) (Preference will be given to C.W. Coop students.)
NO(0-3)

***C W 404D (1½) ADVANCED TOPICS IN PHOTOJOURNALISM**
A workshop seminar in photography examining recent trends including the book length photo essay, personal statements and the increasing use of colour. (Students must have a 35 mm camera with light meter and flash and they must spend about $50 on film and printing paper.

Darkroom facilities are provided by the department.) (Evaluation will be on the basis of projects.) (*Prerequisites:* 404C and permission of the Department) (Preference will be given to C.W. Coop students.) NO(0-3)

***C W 405 (1½) INNOVATIONS IN 20TH CENTURY POETRY**
A lecture course surveying key works in 20th century poetry and discussing experimental writing. The material discussed will be taken from the literature of a number of countries. (*Prerequisite:* Third year standing) F(3-0)

***C W 406 (1½) INNOVATIONS IN 20TH CENTURY FICTION AND DRAMA**
A lecture course surveying key works in 20th century fiction and drama and discussing experimental writing. The material discussed will be taken from the literature of a number of countries. (*Prerequisite:* Third year standing) (3-0)

***C W 415 (1½) BOOK AND MAGAZINE PUBLISHING SEMINAR**
An introduction to the financial, structural, marketing, planning and management aspects of book and magazine publishing as they affect the writer and editor. Emphasis will be on the case study method, with due regard to the history of individuals, companies and organizations in Canada, especially in British Columbia. (*Prerequisite:* 205 or 206) NO(0-3)

C W 416A (1½) NONFICTION WORKSHOP: I
A workshop seminar in which the students are instructed and guided in the writing of major nonfiction forms, such as biography, travel, history, social analysis. (*Prerequisites:* 316B with a B- or higher) FS(0-3)

C W 416B (1½) NONFICTION WORKSHOP: II
A workshop in which the students are instructed and guided in the writing of major nonfiction forms, such as biography, travel, history, social analysis. (*Prerequisites:* 416A with a B- or higher) FS(0-3)

***C W 490 (3) DIRECTED STUDIES IN CREATIVE WRITING**
Under the supervision of a staff member and with the approval of the Chair of the Department. (*Prerequisite:* 12 units in Creative Writing and permission of the instructor)

***C W 491 (1½) DIRECTED STUDIES IN CREATIVE WRITING**
Under the supervision of a faculty member and with the approval of the Chair of the Department. (*Prerequisite:* 12 units in Creative Writing and the permission of the instructor)

* Approved for elective credit in the Faculty of Arts and Science

DEPARTMENT OF HISTORY IN ART

Elizabeth Tumasonis, B.A. (Coll. of Wm. and Mary), M.A. (N.Y.U.), Ph.D. (Calif., Berk.), Assistant Professor and Chair of the Department
John L. Osborne, B.A. (Car.), M.A. (Tor.), Ph.D. (Courtauld Inst., Lond.), Professor
S. Anthony Welch, B.A. (Swarth.), M.A., Ph.D. (Harv.), Professor (Islamic Art History)
Kathlyn Liscomb, B.A. (Tufts), M.A., Ph.D. (Chic.), Assistant Professor
Louisa C. Matthew, B.A., M.A. (Ver.), M.F.A., Ph.D. (Prin.), Assistant Professor
Astri Wright, B.A., M.A. (Corn.), Assistant Professor
Victoria Wyatt, B.A. (Kenyon Coll.), M.A., M.Phil., Ph.D. (Yale), Assistant Professor

Visiting and Adjunct Appointments:
Jan Hulsker, Ph.D. (Leiden), Adjunct Professor (1989-91)
Ariane Isler-de Jongh, B.A., Ph.D. (Montr.), Adjunct Assistant Professor (1989-91)
Nancy Micklewright, B.A., M.A., Ph.D. (Penn.), Visiting Assistant Professor (1990-93)
Judith Patt, B.A. (Stan.), M.A.,Ph.D. (Calif., Berk.), Adjunct Assistant Professor (1989-91)

GRADUATE PROGRAM

For information on the studies leading to the M.A. Degree, see page 270.

B.A. DEGREE PROGRAMS

B.A. Major Program in History in Art

In addition to the general University requirements for graduation (see page 20), students taking a major in History in Art must satisfy the following requirements:

1. Successful completion of 21 units of History in Art courses, of which at least 15 units must be at the 300 or 400 level.
2. These 15 upper level units must include 3 units in each of the three following areas of study: 1) Classical, European; 2) Islamic, Asian; 3) Art of the Americas, modern art and architecture.

Students wishing to declare a major in History in Art should contact the department's undergraduate adviser for program approval.

Museum Studies

An important resource for the History in Art program is the Maltwood Art Museum and Gallery located at the University of Victoria. The Museum administers the Maltwood Collection (an international collection of decorative arts including special emphasis on the Arts and Crafts movement from William Morris to the 1920s) and the University Collection (an extensive collection of western Canadian contemporary art in all media).

The specialized museological library, study gallery, and varied exhibition programs give students a chance to work directly with materials and have firsthand experience in the operations of a University Museum.

B.A. Honours Program in History in Art

The honours program provides the possibility for more intensive study in the field of History in Art, and is intended for those who wish to continue on to graduate studies in History in Art or related professional disciplines.

Students may apply to enter the honours program after the completion of a minimum of nine units of course work in History in Art with a G.P.A. in these courses of 5.00(B) or better. Normally this would be done at the end of the second year. To graduate with a B.A. Honours in History in Art a minimum of 30 units of credit in the Department will be required (out of a total degree program of 60 units). 21 of these units must be at the 300/400 level and should be chosen in consultation with the Honours Adviser. These upper level courses must include:

(a) 3 units to be selected from the fields of European or Egyptian art before the modern period;
(b) 3 units to be selected from the fields of Asian or Islamic art;
(c) 3 units to be selected from the fields of modern art or the art of the Americas;
(d) 3 additional units of non-Western art;
(e) 499 (3 units)
(f) 6 units of History in Art electives.

Language requirement: Before graduation each student will be required to demonstrate a reading knowledge of a language other than English appropriate to the area of special interest. Normally this requirement will be satisfied by completion of a 200 level language course with at least second class standing. (French 180 is also acceptable.) In special circumstances, permission may be sought to take a translation examination administered by the Department.

Standing at graduation: Both first and second class honours degrees are awarded. A First Class honours degree requires a graduating average of 6.50 or higher, as well as an average of 6.50 or higher in all courses taken in the Department at the 300 and 400 level. A Second Class honours degree requires a graduating average in the 3.50-6.49 range, as well as an average of 3.50 or higher in all courses taken in the Depart-

ment at the 300 and 400 level. Third year students whose performance in the honours program falls below a grade point average of 3.50 will be required to transfer to the major program at the beginning of their fourth year. Fourth year students whose graduating average, or whose average in courses taken in the Department at the 300 and 400 level, is below the standard for a Second Class honours degree, but who otherwise meet the University requirements for graduation, will receive a B.A. with a Major in History in Art.

Program of Advanced Studies in Cultural Resource Management

The program of advanced studies in Cultural Resource Management offers a postgraduate Diploma in Cultural Conservation. The Program serves those who are currently employed professionally in museums, art galleries, historic sites, archives, building conservation, and related settings.

The curriculum of the Diploma Program in Cultural Conservation features two areas of specialization: Museum Studies and Architectural Conservation. However, a candidate may register for courses in both areas in order to obtain credit towards the Diploma.

Through continuing education offerings, candidates may enroll in the Diploma Program for part time study, either as unclassified students or for credit towards the Diploma. The courses are offered at the University of Victoria. The two Core courses are normally offered in alternate years as immersion courses during Summer Studies, or as regular courses during the Winter Session. The Special Topics courses are normally offered as immersion courses of two weeks duration periodically throughout the year.

Academic Regulations:

Applicants must have completed a University of Victoria Bachelor's degree or its equivalent.

The program may be completed in a minimum of one calendar year. The normal period of completion is two to three years of part time study. The program must be completed within five years.

Program: (18 units)

(a) Core courses: 486 (3), 487 (3).

(b) Special Topics: Nine units from 488A (1½), 488B (1½), 488C (1½), 488D (1½), 488E (1½), 488F (1½), 488G (1½), 488H (1½),489A (1½), 489B (1½), 489C (1½), 489D (1½), 489E.

(c) Directed Studies: History in Art 490 (3); or 3 units from any History in Art course numbered 300 or above.

Applicants who have previously received credit for any of these courses (or their equivalents) will be allowed to substitute up to six units of courses recommended by the Program's Advisory Committee.

Students may apply to obtain up to six units of credit in advanced standing for equivalent courses or certified training.

Diploma students who fail to maintain at least a grade point average of 5.00 may be asked to withdraw from the program.

Students enrolled in the Diploma in Cultural Conservation may not normally apply credit for any course towards a degree program, e.g., B.A., B.F.A., M.A. Other students may register in individual courses in the Diploma Program as enrollment allows.

Please direct all inquiries to:
Program of Advanced Studies in Cultural Resource Management
Division of University Extension
University of Victoria

Coop Program

The Department of History in Art participates in the Arts Cooperative Education program (see pages 32 and 203). Applications and further information may be obtained from the Office of Cooperative Education.

UNDERGRADUATE COURSES

Courses numbered 300 or higher are normally not offered to first year students.

Only a selection of the following courses can be offered in any particular year. While there are no formal prerequisites for any senior offerings, students taking 400 level courses are warned that a good background knowledge of the subject will be assumed.

(Course offering codes: Y = Sept.-Apr., F = Sept.-Dec., S = Jan.-Apr., K = May-Aug., NO = Not offered, this session)

***H A 120 (3) INTRODUCTION TO WORLD HISTORY IN ART**
An introductory survey of the visual remains of the world's principal civilizations from prehistory to the present day. (Preference in registration given to first and second year students)
V. Wyatt Y(2-0-1)

***H A 222 (1½) THE CLASSICAL TRADITION IN WESTERN ART**
An introduction to the influence of Greco-Roman artistic traditions on subsequent periods of European civilization. The classical inheritance in terms of both style and iconography will be examined in a variety of selected monuments from the Middle Ages through to the 20th century. NO(3-0)

***H A 231 (3) THE GREAT CULTURES OF ASIA**
A survey of Asian art and architecture from 3500 B.C. to the 20th century from the Mediterranean to the Pacific. The course has several particular emphases: the major Asian religions and their arts; secular patronage by the ruling classes; the function of the arts in their societies; and the cultural interconnections between civilizations. NO(3-0)

***H A 250 (HIST 250) (1½) MIDDLE EASTERN CIVILIZATION: THE ANCIENT WORLD**
A survey of the major historical developments and cultural achievements in the Ancient Near East and Egypt from the 4th millenium B.C. to the 7th century A.D. Particular emphasis upon the impact of political and social change on the evolution of civilizations.
N. Micklewright F(3-0)

***H A 251 (HIST 251) (1½) MIDDLE EASTERN CIVILIZATION: ISLAM**
A survey of the major historical developments and cultural achievements in the Islamic Middle East from the 7th century A.D. to modern times.
N. Micklewright S(3-0)

***H A 260 (3) PAINTING AND SCULPTURE IN EUROPE SINCE 1750**
A general introduction to European painting and sculpture from 1750 to the present day including a brief survey of related developments in North America since 1945. The course will survey such movements as Neoclassicism, Romanticism, Realism, Impressionism, Cubism, Fauvism, Expressionism, Constructivism, and Surrealism. Lectures combine formal and contextual analysis, with emphasis on cultural context. NO(3-0)

***H A 262 (3) ART BY WOMEN**
A comprehensive study of women's art through history. The course will include an examination of art forms traditionally associated with women, for example, tapestry, weaving, embroidery and pottery, as well as the art of individual women painters, sculptors, photographers and printmakers. NO(3-0)

***H A 295 (3) INTRODUCTION TO FILM STUDIES**
Film as art, communication, persuasion, cultural ritual. A wide range of films and applications will be studied as well as consideration given to the writings of influential film theorists and critics such as Belazs, Eisenstein, Agee, McLuhan, Metz, Barthes, Cavel, Carpenter, Kael. Specific production techniques will be explained when related to the intention, structure, and result of the films. This course will provide a basic understanding of the place of film in the modern world and serve as introduction to critical and analytical film viewing. NO(3-0)

***H A 310 (ART 310) (1½ or 3) MEDIA AND METHODS**
An examination of the techniques employed by artists throughout history. Areas of special emphasis may include architecture, drawing, painting, photography, printmaking, sculpture, and the various media used in the decorative arts, in western and nonwestern cultures. Historical, geographical, social and economic factors in the development of art technology are considered, together with the interrelation of ideas with material and techniques. Each course will consist of a series of lectures, demonstrations, museum and gallery visits as appropriate. Period and area of emphasis at the discretion of the instructor. (As the emphasis may vary from time to time, the course may be taken for credit more than once, with permission of the Department.) (*Prerequisite:* 120 or permission of the Department)
D. Kelly K(3-0)

***H A 316 (CLAS 371) (1½) ART AND ARCHITECTURE OF ANCIENT GREECE AND THE AEGEAN**
An introduction to art and architecture in Greece and the Aegean from the Early Bronze Age through the Hellenistic period. Architecture, sculpture, and the minor arts are examined as evidence for cultural attitudes towards humankind, the gods, the physical world, and the exploration of form, colour, and movement. Emphasis is placed on the careful discussion of selected monuments illustrated through slides, casts, and photographs. (No prerequisites.) (Not open to students with credit in 315 or CLAS 371) F(3-0)

***H A 317 (CLAS 372) (1½) ART AND ARCHITECTURE OF THE ROMAN WORLD**
A survey of Roman art and architecture relating the political and social development of the Roman people to their artistic expression. After an examination of Etruscan art and architecture for its formative influence on Roman attitudes, Republican and Imperial Roman art are discussed in the context of historical events. Topics include the special character of Roman art, Hellenized and Italic modes of expression, portraiture, historical reliefs, function in art, architectural space and city planning. (No prerequisites.) (Not open to students with credit in 315 or CLAS 372) S(3-0)

***H A 321 (1½) LATE CLASSICAL AND EARLY CHRISTIAN HISTORY IN ART**
An introductory survey of the art and architecture of the Mediterranean world from the origins of Christian art in the 3rd century A.D. to the onset of Iconoclasm in the 8th century. In addition to a detailed examination of surviving monuments and art objects, an emphasis will be placed on the sources of Christian iconography and the relationship between art, theology and liturgy. S(3-0)

***H A 323 (1½) BYZANTINE HISTORY IN ART**
An introductory survey of the art and architecture of the Byzantine empire and its culturally dependent areas from the period of Iconoclasm through to the fall of Constantinople in 1453 and beyond. The emphasis will be on an examination of surviving monuments in Greece, Turkey, southern Italy, the Balkans, and Russia.
L. Jessop F(3-0)

***H A 326 (1½) EARLY MEDIEVAL HISTORY IN ART**
An introductory survey of the arts and architecture of western Europe in the period ca. A.D. 600-1150. Topics to be considered will include Anglo-Saxon, Carolingian, Ottonian, and Romanesque history in art.
L. Jessop K(3-0)

***H A 328 (1½) GOTHIC ART AND ARCHITECTURE**
An introductory survey of the art and architecture of western Europe from the reconstruction of St. Denis ca. 1140 to the beginnings of Renaissance art in Florence ca. 1400. The course will focus primarily on architecture in northern Europe and on painting in Italy, with a concentration on artists from the cities of Florence, Rome and Siena.
L. Jessup K(3-0)

H A 330 (1½) ART AND ARCHITECTURE OF SOUTH ASIA
An introductory survey of art and architecture in South Asia, proceeding from the beginnings of documented history up to the present day, with concentration on the pre-Islamic period. The emphasis will be on the architecture, sculpture and painting of the Hindu and Buddhist traditions in India, and on their adoption into Tibet, Nepal and Sri Lanka.
A. Wright S(3-0)

H A 333 (1½) ART AND ARCHITECTURE OF SOUTHEAST ASIA
A survey of the art and architecture of Southeast Asia from prehistoric times through the classical Hindu-Buddhist and the colonial periods until the beginning of the modern era. (Not open to students with credit in H A 475)
A. Wright F(3-0)

***H A 336 (1½) ART AND ARCHITECTURE OF MODERN INDIA**
A study of Indian art and architecture since the arrival of Western powers and Western religions in the early 16th century to the present. The course will examine material relating to Christian missions, the British presence, the revivalist movement, and contemporary art. NO(3-0)

H A 341 (1½) ART AND ARCHITECTURE OF THE ITALIAN RENAISSANCE
An introductory survey of the art and architecture of the Italian peninsula during the 15th and 16th centuries. Works of art and artist' careers will be examined within the context of such general themes as patronage, materials and methods, function and setting, and religious and intellectual climate.

H A 342 (1½) THE BAROQUE IN EUROPE
An introductory survey of the art and architecture of western Europe from the Counter-Reformation to the middle of the 18th century.

H A 343 (1½) THE 18TH CENTURY IN EUROPE
An intensive study of the art and architecture of western Europe during the 18th century. The main topics to be covered are rococo and Neo-Classicism. (Students should have completed H A 342.)

H A 345 (1½) THE RENAISSANCE TRADITION IN ARCHITECTURE
A survey of the architecture of western Europe from the early Italian Renaissance architecture of Brunelleschi to 18th century Palladian architecture in England.

***H A 352 (formerly half of 351) (1½) THE GENESIS OF ISLAMIC ART AND ARCHITECTURE**
An examination of the background, origins, and evolution of early Islamic art and architecture from the 7th century rise of Islam to the end of the 9th century. The course will investigate the fundamentals of Islam as a faith, Islam's relationship to the pre-Islamic past and the theoretical problem of creating a new visual culture to serve a new religion and society.
A. Welch F(3-0)

***H A 354 (formerly half of 351) (1½) MEDIEVAL ISLAMIC ART AND ARCHITECTURE**
The high medieval art and architecture of Islam from the 10th century to the Mongol invasions of the mid 13th century. The course will focus on the medieval ideal of Islamic unity and the historic fragmentation of Islam into different, often opposed, regional and cultural entities. Major themes will be the emergence of Turkish peoples as the dominant political rulers of the Near East and the impact of Latin and Byzantine Christendom on Islamic visual culture.
N. Micklewright S(3-0)

***H A 355 (1½) THE ART AND ARCHITECTURE OF ANCIENT EGYPT**
A thorough survey of the art and architecture of Pharaonic Egypt from 3200 B.C. to the beginning of the Christian era. Through the examination of artifacts, monuments, and texts the course will investigate the influence of social and religious thought upon Egyptian art. NO(3-0)

***H A 356 (1½) THE ART AND ARCHITECTURE OF THE ANCIENT NEAR EAST**
A comprehensive survey of artistic and architectural traditions in Mesopotamia, Palestine, Antolia, Iran, and related areas from 3500 B.C. to the beginning of the Muslim era (7th century A.D.). The course will emphasize the role of religious thought and social change in shaping architecture and the arts. NO(3-0)

***H A 357 (formerly half of 353) (1½) AMIRATES AND SULTANATES OF THE MUSLIM MEDITERRANEAN**
The art and architecture of Islam in the lands bordering the Mediterranean (Spain, North Africa, Egypt, Palestine, Syria, and Turkey) from the mid 13th to the 20th century. Major areas of emphasis will be the Nasrid dynasty of Spain, the Mamluk dynasty of Egypt, and the Ottoman sultanate of Turkey. Particular attention will be paid to the art of calligraphy and to cross cultural connections between Islam and Western Europe and Byzantium. NO(3-0)

***H A 358 (formerly half of 353) (1½) ISLAM AND ASIA**
The art and architecture of the Muslim lands and peoples east of Mesopotamia (Iran, India, Central Asia, and Southeast Asia) from the 13th to the 20th century. Beginning with the Mongol invasions of Iran in the mid 13th century, this course will focus on the classic Islamic culture of Iran and its diffusion into Central Asia and India. The arts of

the illustrated manuscripts (particularly Persian and Mughal painting) will be a major emphasis. NO(3-0)

***H A 359 (PACI 359) (1½) ISLAMIC ART AND ARCHITECTURE IN SOUTHEAST ASIA**
A survey of the major architectural and artistic achievements of Islamic civilization in the Far East and Southeast Asia from the 16th century to the present day. Emphasis on the social, religious, and cultural impact of Islam on the arts and the subsequent development of distinctive Islamic traditions in this region. NO(3-0)

H A 360 (1½) EUROPEAN ART FROM 1780 TO 1848
An examination of European painting and sculpture from 1780 to 1848. The course begins with the rise of Neoclassicism and the reaction against the Rococo around the time of the French Revolution and continues by tracing the developments in art with the Romantic movement during the early 19th century.

H A 361 (1½) EUROPEAN ART FROM 1848 TO 1880
An examination of European painting and sculpture from 1848 to 1880. The course traces the development and influence of art movements such as Realism, Impressionism, and Symbolism, emphasizing the struggle against the domination of the Academy and of academic art in the later 19th century.

***H A 362 (3) PAINTING AND SCULPTURE SINCE 1880**
A thorough study of European painting and sculpture from 1880 to the present day, concluding with a consideration of post 1945 developments in North America. The course begins with Van Gogh, Gauguin, Cezanne, and Rodin and traces the development and influence of such movements as Cubism, Expressionism, Constructivism, and Surrealism and the careers of individual artists, i.e., Matisse, Picasso, Nolde, Malevich, Kandinsky, Mondrian, and Brancusi. Lectures combine formal and contextual analysis.
E. Tumasonis Y(3-0)

***H A 363 (1½) THE CINEMA AND MODERN ART MOVEMENTS**
An examination of the history of film in relationship to the major art movements of the 20th century. Students will view and analyze films by such directors as Lang, Eisenstein, Bunuel, Brakhage, and Snow; these films will be discussed in the light of their connection to such influential modern art movements as German Expressionism, Russian Constructivism, Surrealism, Abstract Expressionism, and Conceptual Art.
E. Tumasonis NO(3-0)

***H A 364 (1½) DOCUMENTARY FILM**
An intensive study of film as document of time, place and action. Influence of social and artistic context will be considered. Attention will be largely directed to Canadian documentary films, a leader in this genre today. Films studied may include works by Flaherty, Grierson, Lorentz, Riefenstahl, Wiseman, National Film Board. K(3-0)

***H A 365 (1½) EXPERIMENTAL AND ART FILM**
A survey of 'pure' film: film as art which exists only in the form of film. Influence of other art forms as well as technical and economic aspects will be considered. Attention will be largely directed to Canadian experimental and art film. Films studied may include works by McLaren, Brakhage, Van Der Beek, Knowlton, Lipsett, May, Eames. NO(3-0)

***H A 366 (1½) INTRODUCTION TO HISTORY IN CINEMA**
A general introduction to film as an art form of world importance. Film will be considered historically as a product of time and place as well as a medium influencing many aspects of our lives. There will be consideration of genres, of directors' styles, of technical aspects, and the relationship of film to other media. (Preference given to third and fourth year students) NO(2-2)

***H A 367 (1½) INTRODUCTION TO HISTORY IN CINEMA**
A more specialized investigation into cinema with attention to the use of myth and symbol. Significant cinema genres, selected directors and national styles, including Canadian, will be examined. (Preference given to third and fourth year students, and to those students who have completed 366) NO(2-2)

H A 368A (1½) (formerly half of 368) HISTORY OF EARLY CANADIAN ART
A history of the visual arts, especially painting and sculpture, in Canada from the time of the first European explorers in the 16th century up to the early 20th century, including the work of the Group of Seven. The course emphasizes the growth of national concerns in the art of a developing country.
J. Whittaker K(3-0)

H A 368B (1½) (formerly half of 368) HISTORY OF MODERN CANADIAN ART
A history of the visual arts, especially painting and sculpture, in Canada, from the early 20th century to the present day. The course emphasizes the shift in Canadian art from national concerns to international modernism. (Students should have completed 368A.)
J. Whittaker K(3-0)

H A 369 (1½) HISTORY OF PHOTOGRAPHY
An introductory survey of the history of photography from its invention in 1839 until the present. Topics to be addressed include the changing role of the photographer as scientist and artist, the relationship between photography and other visual arts, 19th century travel photography, women photographers, and the various photographic processes which have been developed in the 150 year history of the medium.
N. Micklewright S(3-0)

***H A 371 (PACI 371) (1½) EARLY CHINESE ART**
An introductory survey of Chinese art from the Neolithic period through the Tang dynasty. Topics include the ritual vessels of the Bronze age, the impact of the Indian religion of Buddhism on Chinese arts, the rise of landscape painting, and the classic era of figure painting. Chinese histories and theories of the arts will be read in translation. NO(3-0)

***H A 372 (PACI 372) (1½) LATER CHINESE ART**
An introductory survey of Chinese art from the Five Dynasties era to the present. The emphasis will be on the various genres and styles of painting, and on the role of the educated elite as painters, patrons, critics and theorists. (Students should have completed HA 371 or the equivalent)

***H A 373 (PACI 373) (1½) EARLY JAPANESE ART**
An introductory survey of Japanese art which traces the history of Japan's absorption and transformation of continental (Chinese and Korean) influences from prehistoric times through the Kamakura period. The emphasis is on Buddhist arts and the rise of the long narrative handscrolls knows as *emakimono* during the Heian and Kamakura periods.
K. Liscomb F(3-0)

***H A 374 (PACI 374) (1½) LATER JAPANESE ART**
An introductory survey of Japanese art from the Muromachi through the Edo periods. The emphasis is on the impact of Zen Buddhism on several art forms; the new castles with their paintings on sliding doors and folding screens; and the various schools of painting and printmaking active during the Edo period, an era during which revivals of native styles flourished along side experiments inspired by Chinese and Western art. (Students should have completed 373 or the equivalent)
K. Liscomb S(3-0)

***H A 375A (1½) (formerly half of 375) PRE-COLUMBIAN ART**
The art of central and southern Meco and northern Central America before 1492. This culture area called Mesoamerica was characterized by high civilization. (*Prerequisite:* None) NO(3-0)

***H A 375B (1½) (formerly half of 375) PRE-COLUMBIAN ART**
The art of South America before 1492 in the Andean area characterized by high civilization. (*Prerequisite:* None) NO(3-0)

***H A 382A (formerly half of 382) (1½) NORTH AMERICAN INDIAN ART**
An introduction to North American Indian art from its emergence in prehistoric times to the present. Culture areas covered are the Northwest

coast, the Arctic (Inuit and Eskimo), and the Northern Athabascan. (*Prerequisite:* None)
V. Wyatt F(3-0)

***H A 382B (formerly half of 382) (1½) NORTH AMERICAN INDIAN ART**
An introduction to North American Indian art from its emergence in prehistoric times to the present. Culture areas covered are the Great Plains, Southwestern U.S., Eastern Woodlands, and California. (*Prerequisite:* None)

H A 384 (1½) ARTS OF THE NORTHWEST COAST
An advanced level study of the native arts of the Northwest Coast from prehistoric times to the present. Emphasis will be placed on stylistic analysis, historical and cultural contexts, and changes and continuities in artistic expression in the 19th and 20th centuries. (*Prerequisite:* HA 382A or permission of the Department)
V. Wyatt S(3-0)

***H A 387 (1½) HISTORY OF MODERNISM IN ARCHITECTURE**
A history of the concept of modernism as it was reflected in architecture from its origins in the early 19th century up to the present. The course traces the changes in architectural style under the influence of this concept, as well as the effect of new materials and new techniques upon modern architecture.
E. Tumasonis S(3-0)

***H A 420 (1½, formerly 3) SPECIAL STUDIES IN MEDIEVAL ART**
A different aspect or period of medieval art will be selected for study each year. Emphasis will be placed on a detailed study of a limited number of works rather than a general survey. (May be taken more than once, depending on circumstances) F(3-0)

***H A 430 (1½ or 3) SPECIAL STUDIES IN THE ARTS OF SOUTH AND SOUTHEAST ASIA**
An intensive study of a selected aspect or area of the arts of South and Southeast Asia (The course maybe taken for credit more than once, in different topics.)

H A 431 (1½) MODERN PAINTING IN INDONESIA
A study of the introduction and development of modern painting from the West to Indonesia in the 20th century. Changes in Indonesian definitions of 'art' and 'artist' over three generations of selected painters will be set against a background of traditional painting, and of other two-dimensional arts such as textiles.
A. Wright F(3-0)

H A 433 (1½) IMAGES OF AND BY WOMEN IN SOUTHEAST ASIAN ART
An examination of two interrelated spheres of artistic images as they relate to ideas about women and their place in the universe. Depictions of women in classical, elite, folk and modern art throughout Southeast Asia will be examined and compared to images of femaleness and self found in the arts created by women. The course will thus highlight local ideas about symbolism, style, gender and hierarchy.
A. Wright S(3-0)

***H A 441 (3) NORTHERN RENAISSANCE**
An intensive survey of the painting of Northern Europe from 1300 to 1550. The major monuments of these areas will be considered in terms of their historic and religious significance. Y(3-0)

H A 442 (1½) THE HIGH RENAISSANCE IN ITALY
An intensive study of the art and architecture of Italy between 1480 and 1520. Emphasis will be placed on the careers of Leonardo da Vinci, Raphael and Michelangelo, and on the role of papal patronage in Rome. (Students should have completed HA 341)

H A 443 (1½) THE LATE RENAISSANCE IN ITALY
An intensive study of the art and architecture of Italy between 1520 and 1580. Topics will include the role of prints and drawings, definitions of Mannerism, and contemporary theories of art and art history. Intended as a sequel to HA 442. Students should have completed HA 341 or 442.

H A 444 (1½) VENETIAN PAINTING
A survey of painting in the Republic of Venice from the 14th to the 18th century, with an emphasis on the uniqueness of the Venetian tradition and its relationship to other centres of artistic production. Topics will include the careers of individual artists, the role of workshops, and the demands of function, setting, and patronage. Students should have completed HA 341 or 342.

H A 445 (1½) SPECIAL STUDIES IN RENAISSANCE ART
An intensive study of a selected aspect of Renaissance art. Enrollment will be limited to permit a seminar format. May be taken for credit more than once, on different topics (*Prerequisite:* permission of the instructor)

H A 447 (1½) SPECIAL STUDIES IN BAROQUE AND 18TH CENTURY ART
An intensive study of a selected aspect of Baroque or 18th century art. Enrollment will be limited to permit a seminar format. May be taken for credit more than once, on different topics (*Prerequisite:* permission of the instructor).

***H A 450 (1½ or 3) TOPICS IN ISLAMIC ART AND CIVILIZATION**
This course will involve intensive study of some special aspect or area of Islamic civilization. Content may vary each year. (May be taken for credit more than once depending on circumstances)
N. Micklewright (topic: Turkish Art and Architecture) NO(3-0)

***H A 451 (1½) ISLAMIC ARCHITECTURE**
An examination of the architectural traditions of Muslim peoples from Spain to South Asia with emphasis on the historical development of Islam's architectural idiom, the geographic dispersion of its forms, the relationship of architecture to its urban context, and the role of architectural patrons. NO(3-0)

***H A 455 (1½) PERSIAN PAINTING**
A study of the history and development of painting in Iran from the 13th to the 19th centuries. The course will examine the major masters, patrons, and style of Persian miniature painting and will trace the influence of Persian painting on the arts of Mughal India and Ottoman Turkey.
NO(3-0)

***H A 460 (1½ or 3) SPECIAL STUDIES IN 20th CENTURY ART**
Intensive study of modern movements (e.g., Cubism, Surrealism, Expressionism) or specific problems (art and politics, critical theory) in 20th century art. Combination of topics will vary. NO(3-0)

***H A 462 (HIST 462) (3) ART AND REVOLUTION**
Examines the role of the artist (mainly through painting and graphics) in the major social and political revolution of modern times. Major emphasis on the French, Russian, and Chinese revolutions but some consideration of political art in other revolutions and movements of social protest. NO(3-0)

***H A 463 (1½ or 3) TOPICS AND ISSUES IN POLITICAL ART**
Studies in political art, that is, art which directly refers to social and political issues, rather than the question of the social background and function of art in general. Although the specific periods and topics covered vary, each seminar examines issues of the artists' social conscience and aesthetic effect, state control and manipulation of the arts, art as instrument for and expression of social change. NO(3-0)

***H A 464 (3) CONTEMPORARY ART**
An intensive study of major art movements in Europe and North America since World War II. Course includes an examination of recent painting and sculpture, as well as considering less conventional art forms, such as installations, earthworks, and performance art. (*Prerequisite:* H A 260 or H A 362) Y(3-0)

***H A 470 (1½ or 3) SPECIAL STUDIES IN EAST ASIAN ART**
Intensive studies of special aspects of Chinese or Japanese art. Course content will vary. (This course may be taken for credit more than once in different topics with permission of the Department) NO(3-0)

***H A 471 (1½) EARLY CHINESE PAINTING**
An advanced level study of Chinese painting from the Chou dynasty through the Sung dynasty. The emphasis will be on tracing the major stylistic periods and on studying the relationship of painting to philosophy, political history, literature and calligraphy. Chinese histories and theories of painting will be read in translation. (Students should have completed 371 or the equivalent.) NO(3-0)

***H A 472 (1½) LATER CHINESE PAINTING**
An advanced level study of Chinese painting which coveres the Yuan, Ming, and Ch'ing dynasties. During these three dynasties, painters reinterpreted earlier painting traditions in order to express their own ideas and feelings. The emphasis will be on discovering how major changes took place within this basically conservative framework, and on the role of Chinese critics and art historians. (Students should have completed 372 or the equivalent.) NO(3-0)

***H A 473 (1½) JAPANESE PAINTING**
An advanced level survey of Japanese painting and printmaking from prehistoric times through the Edo period. Topics include Buddhist painting, narrative handscrolls, Chinese influenced ink painting, the development of various styles suitable for large paintings on sliding doors and folding screens, and the many schools of Edo Japan: Rimpa, Nanga, Maruyama-Shijo, and Ukiyo-e. (Students should have completed 373 or the equivalent.) NO(3-0)

***H A 474 (1½) UKIYO-E PRINTS AND PAINTING**
An advanced level survey of the Ukiyo-e school of painting and prints in Edo Japan. Major artists of this school will be discussed in the context of the popular culture of that era, which also created a new style of novels and drama (kabuki). (Students should have completed 374 or the equivalent.) NO(3-0)

H A 482 (1½ or 3) SPECIAL STUDIES IN TRIBAL ARTS
An intensive study of a selected aspect of Native American, Arctic, Pre-Columbian, African or Oceanic art, or a comparative examination of a theme pertinent to tribal arts from more than one culture area. (May be taken for credit more than once, on different topics) (*Prerequisite:* HA 375A/B or 382A/B, depending on topic)

H A 486 (3) INTRODUCTION TO MUSEUM STUDIES
Collection, organization, maintenance and presentation of museum materials. History and purpose of collections, principles of collections management and research, preservation, care and handling of collections, public presentation of exhibitions, museum organization and management. Topic emphasis at the discretion of the instructor; may involve fieldwork. Depending on instructor and areas covered, and with departmental permission, this course may be taken more than once. (*Prerequisites:* None) (For students taking this course in a distance education format, grading may be INP, final grade.) NO(3-0)

H A 487 (3) INTRODUCTION TO HERITAGE CONSERVATION
Care, preservation and maintenance of historic sites and buildings; the conservation of architecture within a museum and urban context; programs and practices in Canada and other countries; procedures for site examination and evaluation; materials pathology; site planning, development and management. Case studies and field work may be required. Topic emphasis at the discretion of the instructor. Depending on the instructor and areas covered, and with departmental permission, this course may be taken more than once. (*Prerequisites:* None) (For students taking this course in a distance education format, grading may be INP, final grade.) Y(3-0)

Further information on all courses in the H A 488 and 489 series may be obtained from the office of the Program of Advanced Studies in Cultural Resource Management, Division of University Extension and Community Relations.

H A 488 (1½) SPECIAL STUDIES IN MUSEOLOGY
This course may be taken more than once, in different fields, at the discretion of the Department. NO(3-0)

H A 488A (1½) ADMINISTRATION OF MUSEUMS AND ART GALLERIES
Topics will include: administration of collections policies; accountability, financial management, and program balance; administrative theory and practice; personnel administration; law in the museum and gallery. NO(3-0)

H A 488B (1½) COLLECTIONS MANAGEMENT
Topics include: collections policies; terminology; classification and cataloguing; accessioning and deaccessioning; loans; gifts; importing and exporting. The course may be offered with an emphasis in computers and the management of collections. NO(3-0)

H A 488C (1½) EXHIBIT DESIGN AND DEVELOPMENT
Topics include the planning, design, production, and evaluation of exhibits. Problems in installation will be considered. Students will be assigned a project in the design of scale model exhibits. NO(3-0)

H A 488D (1½) CURATORIAL CARE OF ARTIFACTS
Studies in the conservation of artifacts in metal, ceramics, wood, bone, leather, and other materials. Special emphasis is given to the analysis of environmental factors and the nature of materials. The course includes demonstrations in handling, storage, and packing techniques. Assignments normally will include the preparation of condition reports. NO(3-0)

H A 488E (1½) CURATORIAL CARE OF PAPER
Studies in the conservation of paper artifacts, particularly archival materials and works of art on paper. Topics include: the monitoring and control of environmental conditions; storage; handling; treatments. Projects involving practices in the conservation of paper will be assigned. NO (3-0)

H A 488F (1½) CURATORIAL CARE OF PAINTINGS
Studies in the conservation of paintings on panel, canvas, and other surfaces. Topics include: documentation of condition; nature of materials and historical uses of media; remedial conservation; curatorial care and maintenance of collections; connoisseurship. NO (3-0)

H A 488G (1½) INTERPRETATION TECHNIQUES AND PROGRAM EVALUATION
The course examines interpretation as a method of communicating with the public in museums, art galleries, historic sites, parks, and related settings. The theory and application of interpretation will be considered. The course emphasizes strategies for implementing program ideas, planning, setting objectives, evaluation, and the development of skills. NO(3-0)

H A 488H (1½) TOPICS IN MUSEUM STUDIES
This course will involve intensive study of some special aspect or area of museum studies. Content may vary each year. (May be taken for credit more than once depending on circumstances) NO(3-0)

H A 488J (1½) CURATORSHIP
This course examines the philosophy of collecting and the application of disciplinary research in the museum context. Topics include collections and acquisition policies, object oriented research methods, documentation analysis, information management and the communication of research through exhibitions, films and print publications. NO(3-0)

H A 489 (1½) SPECIAL STUDIES IN ARCHITECTURAL CONSERVATION
This course may be taken more than once, in different fields, at the discretion of the Department. NO

H A 489A (1½) STUDIES IN URBAN AND RURAL CONSERVATION
Topics in the preservation and rehabilitation of historic urban and rural areas. The historical, aesthetic, economic, social, and legal aspects of heritage area planning will be considered. Case histories and planning models will be discussed. An applied studies project normally will be assigned. NO(3-0)

H A 489B (1½) SURVEY METHODS IN BUILDING CONSERVATION
An intensive examination of methods employed in surveying and recording historic architecture. Topics include: documentation; measured drawings; regular and rectified photography; scale models. NO(3-0)

H A 489C (1½) EVALUATION OF HISTORIC ARCHITECTURE
An examination of the theory and practice of evaluating historic architecture. Topics include: surveys, research methods; stylistic analysis; preparation of inventories; evaluation criteria; scoring techniques.
NO(3-0)

H A 489D (1½) STUDIES IN BUILDING CONSERVATION
Theoretical and applied studies in the conservation of historic architecture. Course topics include site history, pathology, preservation and repair of materials (wood, masonry, brick, plasterwork, metalwork), chromochronology. Laboratory sessions on the examination and analysis of materials will be conducted. NO(3-0)

H A 489E (1½) TOPICS IN ARCHITECTURAL CONSERVATION
This course will involve intensive study of some special aspect or area of architectural conservation. Content may vary each year. (May be taken for credit more than once depending on circumstances) NO(3-0)

***H A 490 (1½ or 3) DIRECTED STUDIES**
This course may be taken more than once, in different fields, at the discretion of the Department. Available to History in Art major, honours and diploma program students only.

H A 491 (3) INTERNSHIP
Available to students in the Cultural Resource Management Diploma program only. (Grading: INP, COM, N or F)

H A 499 (3) HONOURS SEMINAR
This course is intended to instruct fourth year honour students in problems and methodology of advanced research.
K. Liscomb Y(3-0)

* Approved for elective credit in the Faculty of Arts and Science.

SCHOOL OF MUSIC

Gordana Lazarevich, Artist and Licentiate Dip. (Tor.), B.Sc., M.Sc., (Juilliard), Ph.D. (Col.), Professor and Director of the School
Alexandra Browning-Moore, B.Mus. (Brit. Col.), Professor (voice)
Franklin E. Churchley, A.R.C.T., L.R.C.T. (Royal Cons. Mus.), B.Mus. (Tor.), M.A., Ed.D. (Col.), Professor (Education)
George Corwin, B.S. (Ithaca), M.A., D.M.A. (Roch.), Professor
William Kinderman, B.A. (Dickinson Coll.), Ph.D. (Calif., Berk.), Professor
Paul Kling, Artist's Diploma (State Cons. of Music, Brno), Artist's Diploma (Academy of Musical Arts, Prague), Professor (violin)
Louis D. Ranger, B.Mus. (Juilliard), Professor (trumpet)
Erich P. Schwandt, B.A., M.A., Ph.D. (Stan.), Professor
Phillip T. Young, B.A. (Bowdoin), M.Mus. (Yale), Professor
John A. Celona, B.M., M.A. (San Fran. St.), Ph.D. (Calif., San Diego), Associate Professor
Richard Ely, B.M. (Mon.), M.M. (Ill.), Associate Professor (french horn)
Harald M. Krebs, B.Mus. (Brit. Col.), M.Phil., Ph.D. (Yale), Associate Professor
Michael M. Longton, B.M., M.M. (Brit. Col.), Associate Professor
Bruce E. More, B.Mus. (Brit. Col.), M.Mus., M.M.A., D.M.A. (Yale), Associate Professor
Bruce Vogt, A.R.C.T. (Tor.), B.Mus. (W. Ont.), M.Mus. (Tor.), Associate Professor (piano)
Ian McDougall, B.Mus., M.Mus. (Brit. Col.), Associate Professor (trombone, Big Band)
Patricia Kostek, B.Sc. (Mansfield St. Coll.), M.Mus. (Mich. St.), Assistant Professor (clarinet)
Alexandra Pohran, B.Mus. (Tor.), Assistant Professor (oboe, chamber music)
Lanny Pollet, B.Mus. (Eastman), M.Mus. (U. of Vic.), Assistant Professor (flute)
W. Andrew Schloss, B.A. (Bennington Coll.), Ph.D. (Stan.), Assistant Professor
M. Elaine Daniels, Administrative Officer

Artists-In-Residence:

Lafayette String Quartet:
Ann Elliott-Goldschmid, B.M. (Boston) (violin, chamber music)
Pamela R. Highbaugh, B.M. (Calif. St.), M.M. (Indiana) (cello, chamber music)
Joanna E. Hood, B.M. (San Fran. Cons. Mus.), M.M. (Indiana) (viola, chamber music)
Sharon M. Stanis, B.M., M.M. (Indiana) (violin, chamber music)

Visiting, Adjunct and Cross-Listed Appointments:

Murray Adaskin, O.C., LL.D. (Leth., U. of Vic.), D.Mus. (Bran.), D.Mus. (Windsor) Adjunct Professor (1990-92)
Robin Wood, F.R.A.M., LL.D. (U. of Vic.), Visiting Professor (1991-92)
Jaroslav Karlovsky, Artist's Dipl. (State Cons. of Music, Prague), Artist's Dipl. (Academy of Musical Arts, Prague), Visiting Associate Professor (viola) (1990-91)
Sandra L. Acker, B.A. (Mich.), M.A. (Wash. St.), B.L.S. (Alta.), Adjunct Assistant Professor (1990-92)
John Burke, B.Mus. (McG.), M.Mus., D.M.A. (Mich.), Visiting Assistant Professor (1991-92)
Eugene A. Dowling, B.M. (Mich. St.), M.M. (Northw.) (tuba)
Alexander Dunn, B.Mus., M.Mus. (San Fran. Cons. Mus.), Ph.D. (Calif., San Diego), Visiting Assistant Professor (1990-91)
Gregory S. Johnston, B.Mus. (Calg.), M.A., Ph.D. (Brit. Col.), Visiting Assistant Professor (1990-91)
Gerald N. King, B.Mus. (Brit. Col.), M.Mus. (W. Wash.), Assistant Professor (Education) (1990-92)
Susan Young, B.A. (B.Y.U.), M.Mus. (Calg.) Visiting Assistant Professor (voice) (1990-91)
Salvador Ferreras, B.Mus. (Windsor) Visiting Lecturer (percussion) (1990-91)

Part-time Lecturers (Individual tuition) 1990-91 Session:

Joan Backus, B.Mus., M.A., Ph.D. (U. of Vic.) (history, theory)
Anthony Booker, B.Mus., M.Mus. (U. of Vic.) (piano accompanist)
Christoph Both, M.Ed. (Fran.) (cello)
Pablo Roberto Diemecke (violin)
Judith Dowling, B.Mus. (U. of Vic.) (voice)
Lynne Greenwood, B.Mus. (Indiana), M.Mus. (Northw.) (saxophone)
Thomas G. Eadie, B.M., M.M. (Eastman) (trombone)
Helen Hall, B.Mus. (Acad.), M.A. (U. of Vic.) (piano)
Nancy Hilborn, B.Mus.Ed. (W. Ont.) (bassoon)
Robert Holliston, A.V.C.M. (Vic. Cons. Mus.) (piano accompanist)
Eva Kinderman, Perf. Dip. (Vienna) (piano)
Taka Kling, M.M. (Tokyo), Artist's Dip. (Vienna) (harp)
Catherine F. Lewis, B.Mus. (U. of Vic.) (voice)
May-Ling Kwok, B.Mus. (U. of Vic.), M.M. (Ind.) (piano)
Christopher Light, B.Mus. (Brit. Col.) (double bass)
Kathryn Ranger, B.Mus. (Indiana), M.Mus. (Sarah Lawrence) (violin)
Winifred Wood, A.R.A.M. (Lond.) (piano)

GRADUATE PROGRAMS

For information on studies leading to the M.A., M.Mus. and Ph.D. degrees, see page 277.

UNDERGRADUATE PROGRAMS

For students who wish to prepare themselves for careers in music, graduate study, etc., the School of Music offers majors in Composition and Theory, Music Education, Music History and Literature, Comprehensive (formerly General) Program, and Performance, leading to the degree of Bachelor of Music.

ADMISSION REQUIREMENTS

Enrollment in the Bachelor of Music program is limited at the present time to approximately 180 students.

1. *Applicants from Secondary School*

Students must apply to the Admissions Office for acceptance to the University *and in addition* must make separate application to the School of Music for acceptance to the program. The School requires that all prospective students demonstrate ability in an accepted performance area (instrument or voice). For this purpose a personal audition is recommended; if an audition is not possible a high quality tape recording may be submitted instead. All applicants must submit two letters of recommendation from qualified musicians. Auditions are held each year beginning in late March. Students are urged to apply as early as possible since places cannot be guaranteed for qualified applicants once positions are filled.

Audition appointments and further information may be obtained from:

School of Music
University of Victoria
P.O. Box 1700, Victoria, B.C. V8W 2Y2
(604) 721-7902

2. *Applicants from Other Universities and Colleges*

The procedure is the same as that described in the preceding paragraph. The Director of Admissions will consult the School for advice on transfer credit for music courses that have been completed elsewhere. This credit and School admission procedures will determine into which year of studies the student will be accepted. No students are admitted into the final, fourth year.

PROGRAM OF COURSES

All B.Mus. students, regardless of their eventual choice of major, are required to take a common first year program.

Year 1

101A	1
101B	1
110	3
140	2
170	1
180*	1
181*	1
English 100 level**	3
Nonmusic elective	3
	16

*Not required for students whose principal performance area is voice.

**Students entering a Music Education Major require a minimum of C+ in ENGL 115 or an average of C+ in ENGL 121/122.

In addition to the courses listed above, students intending to major in Composition must enroll in 105, and students wishing to major in Music Education must register in ME 101 (Secondary) or ME 106 (Elementary). These courses may function as music electives or non-music electives in all B.Mus. programs.

All B.Mus. students are required to demonstrate proficiency at the keyboard. Students who fail to satisfy this requirement by the end of the first year may be required to complete 236.

At the end of the common first year, each student will declare a choice of major and will be assigned a faculty adviser who will assist in selecting appropriate elective courses, ensure that program requirements are satisfied and oversee year to year progress. Acceptance into the major program of the student's choice and continuance in that major must be approved by the appropriate division of the School. A student whose progress is judged to be unsatisfactory may be refused permission to continue in the chosen original major.

Students who intend to pursue a career in Music Education will register in the B.Mus. program with a major in Music Education. Those completing this program will automatically qualify for admission to the Post Degree Professional Program with the same priority status as regular B.Ed. students.

Exceptions to the following program requirements can be made only in special cases and with the written approval of the Director.

Major in Composition and Theory

Year 2		*Year 3*		*Year 4*	
201	2	301	3	Two of: 401A, 401B	
205	3	305	3	401C, 401D	3
240	2	306	1½	405	3
270	1	307	1½	440	2
350	3	340	2	Music elective	3
Nonmusic elective	3	Nonmusic elective	3	Nonmusic elective	3
	14		14		14

See Ensemble Requirements below.

Major in Music History and Literature

Year 2		*Year 3*		*Year 4*	
Music history elective	3	Music history elective	3	Music history elective	3
201	2	301	3	Two of; 401A, 401B	
240	2	340	2	401C, 401D	3
270	1	390	3	440	2
Music or non-music elective	3	Nonmusic elective	3	499	3
Nonmusic elective	3			Nonmusic elective	3
	14		14		14

See Ensemble Requirements below.

Major in Comprehensive Program

Year 2		*Year 3*		*Year 4*	
201	2	301	3	Two of: 401A, 401B	
240	2	340	2	401C, 401D	3
270	1	*Music electives	6	440	2
*Music electives	6	**Nonmusic elective	3	*Music elective	3
**Nonmusic elective	3			**Nonmusic elective	3
				Nonmusic elective or music elective	3
	14		14		14

See Ensemble Requirements below.

* Music electives must include:
(a) at least 3 units of music history above the 110 level
(b) either 350 or 356.

** Nonmusic electives will normally include:
(a) 6 units of language courses, preferably German, Italian, or French
(b) 3 units of art history, theatre history, or classics
(c) 3 units of philosophy, mathematics or a science.

Major in Performance

Year 2		*Year 3*		*Year 4*	
201	2	301	3	Two of; 401A, 401B	
245	6	345	6	401C, 401D	3
270	1	Music history elective	3	445	6
Music or non-music elective	3	Nonmusic elective	3	447	3
Nonmusic elective	3			Nonmusic elective	3
	15		15		15

See Ensemble Requirements below.

* Piano majors are advised to take 360 in addition to the courses listed.

Major in Music Education — Secondary (Instrumental)

Year 2		*Year 3*	
201	2	301	3
240	2	340	2
270	1	356	3
One of: 236, 330, 331, 332, 333	1½	One of: 330, 331, 332, 333	1½
M E 120 or 121	1	ED-D 401	1½
M E 201	1½	M E 220 or 221	1
M E 216	2	M E 301	1½
M E 402	1½	M E 316	1
Music history elective	3		
	15½		15

Year 4 (Degree Year)		***Year 5 (Professional Year in Education)*
Two of: 401A, 401B, 401C, 401D	3	
440	2	See Special Music Program, page 142, for course requirements
One of: 330, 331, 332 333	1½	

ED-D 406	3
M E 401	1½
Music or non-music elective	3
	14

See Ensemble Requirements below.

Major in Music Education — Secondary (Choral)

Year 2		*Year 3*	
201	2	301	3
240	2	340	2
270	1	M E 319	1½
M E 121	1	M E 221	1
M E 201	1½	M E 301 or ED-P 398	1½
M E 216	2	ED-D 406	3
Second Teaching Area	3	356	3
Music or non-music elective	3		
	15½		15

Year 4 (Degree Year)		***Year 5 (Professional Year in Education*
Two of: 401A, 401B, 401C, 401D	3	
440	2	See Special Music program, page 166, for course requirements
One of M E 221, 321 or 421	1	
ED-P 498 or ME 401	1½	
ED-D 401	1½	
Nonmusic elective (2nd teaching area)	3	
320 or Music history elective	3	
	15	

See Ensemble Requirements below.

* Before Year 5, an Introductory Psychology course and Theatre 150 are recommended. A grade point average of 4.00 in the upper level music courses and a grade point average of 3.00 in the immediately preceding two years (30 units) is required.

Major in Music Education — Elementary

Year 2		*Year 3*	
201	2	301	3
240	2	340	2
270	1	M E 319	1½
M E 219	1½	One of M E 350, 400B, 400C	1½
M E 300	1½	MATH 160 A and B (or other approved Math)	3
M E 306	3	ED-B 430	1½
History 130 or an approved lab science	3	Music elective	3
Elective	3		15½
	17		

Year 4 (Degree Year)		*Year 5 (Professional Year in Education)*
Two of: 401A, 401B, 401C, 401D	3	
440	2	See Special Music Program, page 161, for course requirements.
One of: M E 303A, 303B, 303C	1½	
One of: M E 350, 400B, 400C	1½	
ED-B 331	1½	
ED-D 300	1½	
ED-P 297	1½	
Foundations	3	
Total	15½	

See Ensemble Requirements below.

ENSEMBLE REQUIREMENTS

All students in the B.Mus. program are required to participate in ensembles as follows:

Major in Composition and Theory

Year 2: 280 or 281
Year 3: One of: 280, 380, 281, 381
Year 4: One of: 280, 380, 480, 281, 381, 481

Major in Music History and Literature

Year 2: 280 and 281
Year 3: 380 and 381
Year 4: 480 and 481

Major in Comprehensive Program

Year 2: 280 and 281
Year 3: 380 and 381
Year 4: 480 and 481

Major in Performance

(a) Orchestral Instruments
Year 2: 280 (Orchestra or Wind Symphony) and 281
Year 3: 380 (Orchestra or Wind Symphony) and 381
Year 4: 480 (Orchestra or Wind Symphony) and 481
(b) Keyboard Instruments and Guitar
Year 2: 280 (Chorus) and 281
Year 3: 381
Year 4: 481
(c) Voice
Year 2: 280 and 281
Year 3: 380 and 381
Year 4: 480 and 481

Major in Music Education — Secondary (Instrumental and Choral)

Year 2: 280
Year 3: 380 and 281
Year 4: Two of: 480
381
M E 218

Major in Music Education — Elementary

Year 2: 280
Year 3: 281
Year 4: 380 and 381

UNDERGRADUATE COURSES

Not all courses can be offered every year. A list of available courses can be obtained from the School of Music each Spring.

(Course offering codes: Y = Sept.-Apr., F = Sept.-Dec., S = Jan.-Apr., K = May-Aug., NO = Not offered, this session)

* Approved for elective credit in the Faculty of Arts and Science.

***MUS 115 (3) LISTENING TO MUSIC**
A course for the nonprofessional, designed to enhance understanding and appreciation of Western music. Assignments include listening to recordings and attendance at selected University concerts. (Not open to B.Mus. students) Y(3-0)

***MUS 215 (3) TWO COMPOSERS**
Intended for the general listener. In each term, the music of a major composer will be studied, affording comparison of two eras, styles, aesthetics and/or genres, as well as a broad view of each composer's representative works in several media. For example: Beethoven and Stravinsky; Mozart and Duke Ellington; Monteverdi and Wagner. (*Prerequisite:* 115) (Not open to B.Mus. students) NO(3-0)

LANGUAGE OF MUSIC

***MUS 101A (1) INTRODUCTION TO LANGUAGE OF MUSIC**
The rudiments of music, musical notation and an introduction to strict counterpoint. (*Prerequisite:* Evidence of musicanship acceptable to the School) (Not open to students with credit in 100 or 100A) (*Corequisite:* 170) F(3-0)

***MUS 101B (1) LANGUAGE OF MUSIC: I**
A continuation of 101A, introducing harmonic concepts and practices. (Not open to students with credit in 100 or 100B.) (*Prerequisite:* 101A or permission of the School. *Corequisite:* 170) S(3-0)

MUS 170 (1) BASIC MUSICIANSHIP: I
Beginning sightsinging, dictation and corresponding keyboard skills. (*Corequisite:* 101A or 101B) Y(0-3)

***MUS 201 (2) LANGUAGE OF MUSIC: II**
The structural principles, harmonic and contrapuntal practices of tonal music, with particular attention to the music of the late 18th and the 19th centuries, explored through analysis and composition. (*Prerequisite:* 101B or permission of the School. *Corequisite:* 270) (Not open to students with credit in 300) Y(3-0)

MUS 270 (1) BASIC MUSICIANSHIP: II
A continuation of 170. (*Corequisite:* 201 or permission of the School) Y(0-3)

MUS 301 (3) (formerly 400) LANGUAGE OF MUSIC: III
Theory, techniques and practice of 20th century music. (Not open to students with credit for 400) (*Prerequisite:* 101B or permission of the School) Y(3-0)

MUS 401A (1½) TOPICS IN ANALYSIS
The study of particular analytical approach (e.g. Rameau, Schenker) and its applications to a variety of musics. (May be taken more than once for credit in different areas) (*Prerequisite:* 201 or permission of the School) S(3-0)

MUS 401B (1½) BAROQUE COUNTERPOINT
The contrapuntal language of J.S. Bach, his contemporaries and immediate predecessors, explored through writing and analysis. (*Prerequisite:* 201 or permission of the School) F(3-0)

MUS 401C (1½) ACOUSTICS OF MUSIC
The physics of musical sound and the acoustics of musical instruments. Timbre, scales, tuning and temperament. An introduction to psychoacoustical issues. (*Prerequisite:* 201 or permission of the School) F(3-0)

MUS 401D (1½) JAZZ THEORY
Theoretical aspects of jazz, including its harmonic and formal characteristics. (*Prerequisite:* 201 or permission of the School) FS(3-0)

COMPOSITION

MUS 105 (2) INTRODUCTION TO COMPOSITION
This course is designed to enhance one's understanding of and development in compositional systems, processes and techniques through written exercises and assignments related to 20th century musical idioms. (Open to all music students; nonmusic students by permission of the School) Y(2-0)

MUS 204 (2) MUSIC COMPOSITION FOR NONMAJORS: I
Composition class for nonmajors. (Attendance at the Master Class Seminar required.) (*Prerequisite:* 105 or permission of the School) Y(1-1)

MUS 205 (3) MUSIC COMPOSITION: I
Individual lessons with members of the Music Composition faculty. Compositions for solo and small ensembles. (Attendance required at Composition Master Class Seminar. For Music Composition majors.) (*Prerequisite:* Admittance to Music Composition major) Y(2-1)

MUS 304 (2) MUSIC COMPOSITION FOR NONMAJORS: II
Composition class for nonmajors. (Attendance at the Master Class Seminar required.) (*Prerequisite:* 204 or 205 or permission of the School) Y(1-1)

MUS 305 (3) MUSIC COMPOSITION: II
Individual lessons with members of the Music Composition faculty. Compositions for solo, small and large ensembles. (Attendance required at Master Class Seminar. For Music Composition majors.) (*Prerequisite:* 205 or permission of the School) Y(2-1)

MUS 306 (1½) RECORDING TECHNIQUES
Introduction to the use of audio equipment, including tape recorders, mixers, speakers, amplifiers, PA systems. Practical work includes recording sessions and work in a studio. (*Prerequisite:* Permission of the School) F(2-4)

MUS 307 (1½) ELECTRONIC MUSIC: I
Introduction to electronic music. Practical experience in a classical studio, with voltage controlled synthesizers, MIDI, and other electronic music techniques. (*Prerequisite:* 306 and permission of the School) S(2-4)

MUS 404 (2) MUSIC COMPOSITION FOR NONMAJORS: III
Composition class for nonmajors. (Attendance at the Master Class Seminar required.) (*Prerequisite:* 304 or 305 or permission of the School) Y(1-1)

MUS 405 (3) MUSIC COMPOSITION: III
Individual lessons with members of the Music Composition faculty. Majors will complete and have performed a graduating work of advanced and significant scope. (Attendance at Master Class Seminar required. For Music Composition majors.) (*Prerequisite:* 305 or permission of the School) Y(2-1)

MUS 407 (3) ELECTRONIC MUSIC: II
Advanced work in electronic music, including study of digital and analog synthesis and computer controlled systems. (*Prerequisite:* 307 and permission of the School) Y(0-3)

MUSIC HISTORY AND LITERATURE

*** MUS 110 (3) INTRODUCTION TO MUSIC HISTORY AND LITERATURE**
A survey of music literature with emphasis on Western music from plainsong to the 20th century, in the context of general cultural history. The course assumes some experience in listening as well as familiarity with the rudiments of musical notation. Y(3-1)

***MUS 311 (3) MUSIC OF THE MEDIEVAL PERIOD AND THE RENAISSANCE**
(Enrollment limited) (*Prerequisite:* 110) Y(3-0)

*** MUS 312 (3) MUSIC OF THE BAROQUE ERA**
A study of music from c. 1660 - c. 1750. (Enrollment limited) (*Prerequisite:* 110) NO(3-0)

*** MUS 313 (3) MUSIC FROM c. 1730 TO THE LATE 19th CENTURY**
(Enrollment limited) (Not open for credit to those who have taken 314) (*Prerequisite:* 110) NO(3-0)

*** MUS 320 (1½ or 3) WORLD MUSIC**
An introduction to the study of music of Asia, Africa, and aboriginal America, and the relationship of this music to the Western tradition. (Enrollment limited) (*Prerequisite:* 110) NO(3-0)

*** MUS 321 (3) HISTORY OF MUSICAL INSTRUMENTS**
A survey of the development of Western European instruments from antiquity to the present day. (Enrollment limited) (*Prerequisite:* 110)
P.T. Young NO(3-0)

*** MUS 322 (1½ or 3) A COMPOSER'S STYLE AND MUSIC**
A study of works of a major composer in the period from the 15th to 20th centuries. Emphasis will be placed on analysis, style and performance practice. Students may register for this course more than once. (Enrollment limited) (*Prerequisites:* 110 and 101B) S(3-0)

*** MUS 323 (1½ or 3) FORMS AND GENRES IN MUSIC**
The study of a single musical form or genre, for example, opera, symphony, sonata. (Students may register for this course more than once.) (Enrollment limited) (*Prerequisites:* 110 and 101B) F(3-0)

*** MUS 324 (1½ or 3) MUSIC IN CANADA**
The history of music in Canada from the time of Cartier (1534) to the present. (Enrollment limited) (*Prerequisites:* 110 and 101B) S(3-0)

***MUS 325 (3) THE HISTORY OF JAZZ**
A survey of the development and growth of jazz, with emphasis on the major stylistic periods, the principal soloists and composers and the great recorded performances. An extensive collection of listening assignments will be on reserve in the Music and Audio Department of McPherson Library. (*Prerequisites:* 110 and 101B) NO(3-0)

***MUS 326 (1½) TOPICS IN THE HISTORY OF JAZZ**
Students should consult the School for the topic to be considered.) (May not be available to students with credit in 323, History of Jazz, or 325) NO(3-0)

MUS 390 (1½ or 3) SPECIAL STUDIES
With the consent of the School, a student who has demonstrated a capacity for independent work may undertake an individual project. (*Prerequisite:* 110) (3-0)

MUS 490 (1½ or 3) SPECIAL STUDIES
With the consent of the School, a student who has demonstrated a capacity for independent work may undertake an individual project. (*Prerequisite:* 110) (3-0)

MUS 499 (3) SEMINAR IN MUSICOLOGY
For Music History majors only. Seminar will include the graduating essay. Y(3-0)

INSTRUMENTAL AND CHORAL TECHNIQUES

MUS 236 (1½) KEYBOARD
Group instruction in piano. Students who already possess adequate keyboard skills are not permitted to register for this course.
One or two terms: (2-2) or (1-1) Y(1-1)

MUS 330 (1½) STRINGS
Group instruction in playing all orchestral string instruments. NO(1-1)

MUS 331 (1½) BRASSES
Group instruction in playing all orchestral brass instruments. F(2-2)

MUS 332 (1½) WOODWINDS
Group instruction in playing all orchestral woodwind instruments. S(2-2)

MUS 333 (1½) PERCUSSION
Group instruction in playing all orchestral percussion instruments. Y(2-2)

MUS 334 (1½) VOICE
Group instruction in vocal production. K(2-2)

MUS 350 (3) ORCHESTRATION
Study of instrumentation and orchestration. (*Prerequisite:* 101B) Y(3-0)

MUS 356 (3) INTRODUCTION TO CONDUCTING
Fundamental conducting techniques as applied to instrumental and vocal music. (*Prerequisite:* Permission of the School) Y(2-1)

MUS 456 (3) CONDUCTING
(*Prerequisites:* 356 and audition) Y(2-1)

APPLIED MUSIC

Instruction in voice or in an instrument will be provided by the faculty of the School of Music. The courses listed below are normally available only to students registered in the B.Mus. program. B.Mus. students who fail to maintain a load of at least 9 units (12 in the case of performance majors) will be required to withdraw from any course in the 140-440 (or 145-445) series in which they are registered.

MUS 140 (2) INDIVIDUAL TUITION
Lessons in instrument or voice. (*Prerequisite:* Evidence of marked musical ability demonstrated by audition) Y(0-1)

MUS 141 (1) INDIVIDUAL TUITION IN A SECONDARY INSTRUMENT OR VOICE
Lessons in a secondary instrument or voice for exceptional students. May be taken more than once in the same or a different performance area for 1 credit per year to a maximum of 3 credits. Available only with permission of the School. Y(0-½)

141A Strings

141B Woodwinds

141C Brasses

141D Percussion

141E Voice

141F Keyboards

MUS 145 (3) SEMINAR IN PERFORMANCE
Individual tuition and weekly class including discussion of repertoire, pedagogy, and techniques of ensemble performance. (*Prerequisite:* Recommendation of the School) (For Performance Majors only) Y(1-2)

MUS 240 (2) INDIVIDUAL TUITION
Lessons in instrument or voice. (*Prerequisite:* 140) Y(0-1)

MUS 245 (6) SEMINAR IN PERFORMANCE
Individual tuition and weekly class including discussion of repertoire, pedagogy, and techniques of ensemble performance. (*Prerequisite:* 140 or 145, and recommendation of the School) (For Performance Majors only) Y(1-2)

MUS 340 (2) INDIVIDUAL TUITION
Lessons in instrument or voice. (*Prerequisite:* 240) Y(0-1)

MUS 345 (6) SEMINAR IN PERFORMANCE
Individual tuition and weekly class including discussion of repertoire, pedagogy, and techniques of ensemble performance. (*Prerequisite:* 245 or permission of the School) (For Performance Majors only) Y(1-2)

MUS 360 (1½) SEMINAR IN ACCOMPANYING
Principles of accompanying (vocal and instrumental); coaching of selected repertoire. (May be taken more than once at the discretion of the School) (*Prerequisite:* 240 or 245, or permission of the School) Y(1-1)

MUS 361 (1½) SEMINAR IN PIANO PEDAGOGY
Principles of teaching the standard piano repertoire. (May be taken more than once at the discretion of the School) (*Prerequisite:* 240 or 245, or the permission of the School) K(1-1)

MUS 440 (2) INDIVIDUAL TUITION
Lessons in instrument or voice. (*Prerequisite:* 340) (This course may be taken a second time by students in a fifth year of study who have the consent of the Dean of Fine Arts. Such students may be required to participate in ensembles.) Y(0-1)

MUS 445 (6) SEMINAR IN PERFORMANCE
Individual tuition and weekly class including discussion of repertoire, pedagogy, and techniques of ensemble performance. (*Prerequisite:* 345) (For Performance Majors only) Y(1-2)

MUS 447 (3) GRADUATING RECITAL
(*Prerequisite:* 345) (For Performance Majors only)

PERFORMANCE GROUPS

MUS 180 (1) ENSEMBLES Y(0-4)
MUS 181 (1) CHAMBER MUSIC Y(0-3)
MUS 280 (1) ENSEMBLES Y(0-4)
MUS 281 (1) CHAMBER MUSIC Y(0-3)
MUS 380 (1) ENSEMBLES Y(0-4)
MUS 381 (1) CHAMBER MUSIC Y(0-3)
MUS 480 (1) ENSEMBLES Y(0-4)
MUS 481 (1) CHAMBER MUSIC Y(0-3)

180-480, Ensembles, include the University Orchestra, University

Wind Symphony, University Chorus, and University Chamber Singers.

181-481, Chamber Music, include the standard chamber groups as well as Collegium Musicum, New Music Ensemble (Sonic Lab), Opera Ensemble, Jazz Ensemble, Brass Choir, Clarinet Choir, and Accompanying.

480 and 481 may be taken a second time by students in a fifth year of study who have the consent of the Dean of Fine Arts.

DEPARTMENT OF THEATRE

Michael R. Booth, B.A. (Brit. Col.), M.A., Ph.D. (Lond.), Professor and Chair of the Department
Giles W. Hogya, B.A. (Miami), M.A., Ph.D. (Northw.), Professor
Alan Hughes, B.A., M.A. (Tor.), Ph.D. (Birm.), Professor
John F. Krich, A.B. (Baldwin-Wallace), M.F.A. (Yale), Associate Professor
Harvey M. Miller, B.A., M.Ed., M.A., Ph.D. (Pitt.), Associate Professor
Irene M. Pieper, B.A. (Calif.), M.A. (San Fran. St.), Associate Professor
Linda Hardy, B.A. (Brock), M.A. (Tor.), Assistant Professor
Juliana M. Saxton, B.A. (Tor.), Assistant Professor
Allan Stichbury, B.F.A. (Alta.), Assistant Professor
N. Bindon Kinghorn, Senior Academic Assistant and Part time Lecturer
Kazimierz Piesowocki, Senior Academic Assistant and Part time Lecturer
Gysbertus A. Timmermans, B.F.A., M.F.A. (U. of Vic.), Senior Academic Assistant and Part time Lecturer

Visiting and Adjunct Appointments:
Murray D. Edwards, B.A. (Sask.), M.A., Ph.D. (Col.), Adjunct Professor (1989-91)
Morgan Gadd, B.A. (Leth.), M.F.A. (U. of Vic), Visiting Lecturer (1990-91)
Mavor Moore, B.A. (Tor.), D.Litt. (York), Adjunct Professor (1990-91)

GRADUATE PROGRAMS

For information on studies leading to the M.A. and M.F.A. degrees, see page 290.

UNDERGRADUATE PROGRAMS

The Bachelor of Fine Arts in Theatre is an extensive program intended for students who wish to continue their studies in graduate or professional schools and who wish to prepare for a career in community, educational or professional theatre. The philosophy of the Theatre Department is based on the concept that the complex art of the theatre should be studied in all aspects and that by its nature it must be studied in performance. Through all courses and productions the students learn the fundamental performing and technical skills as they study the historical, contemporary and educational practice of the theatre arts.

The Department offers the undergraduate student a choice between an Honours Program in Theatre History and a Theatre Major Program; in the latter, Comprehensive and Special options are available (see Program of Courses).

Students will be required to take part in rehearsals and performances associated with departmental projects. No student may register in an evening course without the permission of the Department.

Theatre Work Outside the Department: The Department does not prohibit students from taking part in external theatre activities, but it is concerned that such activities may affect a student's studies. Therefore, all theatre students must consult either their departmental adviser or the Director of Theatre before accepting any major theatre commitment not related directly to Department of Theatre activities. They should consider the extent of the projected commitment in time and energy, with particular attention to the following:

1. the number of classes which may have to be missed;
2. whether course assignments can be completed by deadline;
3. whether tests, quizzes or examinations will be missed.

ADMISSION PROCEDURES

Enrollment in the Bachelor of Fine Arts in theatre program is limited at the present time.

1. *Applicants from Secondary School*

Students must apply to Admissions Services for acceptance to the University and in addition must make separate application to the Theatre Department. Details of the letter of application may be obtained from the Secretary of the Department. An interview (and therefore a campus visit) is required. Interviews are held each year, normally beginning in late March. If distance precludes a visit, tentative acceptance may be granted until requirements are satisfied in September. Students are urged to apply as early as possible since places cannot be guaranteed for qualified applicants once positions are filled

2. *Applicants from Other Universities and Colleges*

The procedure is the same as that described in the preceding paragraph. The Director of Admissions will consult the Department for advice on transfer credit for theatre courses that have been completed elsewhere. This credit and Department admission procedures will determine into which year of studies the student will be accepted.

PROGRAM OF COURSES

To graduate with a B.F.A. in Theatre, students must complete 60 units of course work of which at least 30 units will be in Theatre and no fewer than 15 outside the Department. In accordance with regulations on page 20, at least 21 units must be numbered at the 300 or 400 level; in addition, at least 15 such units at 300 or 400 level must be in Theatre.

In the first year, students will be required to take Theatre 105, 110, 120 and three units of English. English 115/116 or 121/122 are mandatory for those students planning to enter the Faculty of Education at a future date. In subsequent years the student will be required to complete Theatre 205, 210, 211 and at least 4½ units in the following courses: Theatre 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 410, 411, 414. Additional required courses are outlined in the Honours and Theatre Major Program below.

In second year each student will be assigned an adviser who will develop a program of studies related to the student's needs and abilities. Students may choose either a Theatre Major Program or the Honours Program in Theatre History.

THEATRE MAJOR PROGRAM

Students who choose the Theatre Major Program must select one of two program options: 1) Comprehensive or 2) Special (Acting, Directing, Design, Production and Management, Theatre/Drama in Education, Theatre History). Acceptance and continuance in a Special Program is subject to approval by the Department.

A student in a Special Option normally must complete at least thirty-six units of Theatre course work, of which at least nine units must be in the student's specialization and three units in a related area as determined by the student's adviser. The thirty-six units of Theatre courses must also include the required courses listed above.

Comprehensive Option: Those students who wish to enroll in a course of study which will permit the exploration of a wide range of techniques and aspects of Theatre, in a generalized approach, should choose the Comprehensive Option.

Special Option: Students wishing to emphasize a particular aspect of Theatre should choose the Special Option. This permits the student to concentrate upon one of six specific areas: Acting, Directing, Design, Production and Management, Theatre/Drama in Education, Theatre History.

Students may enter the Option in Acting at the beginning of the third year. Enrollment is normally limited to twelve students per year by selection and is probationary for two weeks. Since enrollment in 221, 222, 223, and 225 is limited to 15 students per section, a selection must take place at the end of the first year. However, admission to second and third year acting courses does not guarantee permission to enter or to continue in the Option. Transfer students who signify their intent to enter this Special Option must audition, normally before the beginning of the academic year. Further regulations are listed in the Department Handbook.

A student wishing to enter the Option in Theatre/Drama in Education required in Education should be aware that several choices exist within the Option, and that to ensure admission to the required third year courses it may be necessary to satisfy prerequisites in the second year. All students wishing to enter the Option should therefore see an academic adviser before registering for second year.

Enrollment is limited in the Directing option. Normally, students must have a cumulative GPA of 5.00.

Students are admitted to the Department of Theatre subject to the annual approval of the Department Chair. Approval will be granted if performance in, and suitability for, the program is satisfactory.

Students may enter the Option in Production and Management at the beginning of the third year. Enrollment is limited; selection is by interview.

Acting

First Year		*Second Year*	
105	3	205	3
110	3	210	1½
120	3	211	1½
English	3	221	1½
Electives	3	222	1½
	15	223	1½
		225	1½
		Electives	3
			15
Third Year		*Fourth Year*	
321	1½	421	1½
322	1½	422	1½
323	1½	423	1½
324	1½	424	1½
325	1½	425	1½
326	1½	426	1½
310, 311, 312, 313, 314, 315 316, 317, 318, 319, 410, 411, 414	1½ or 3*	310, 311, 312, 313, 314, 315, 316, 317, 318 319, 410, 411, 414	1½ or 3*
Electives	4½ or 3	Electives	4½ or 3
	15		15

¤ Audition required

Directing

First Year		*Second Year*	
105	3	205	3
110	3	210	1½
120	3	211	1½
English	3	355	1½
Electives	3	356	1½
	15	Electives (221 & 222 are recommended)	6
			15
Third Year		*Fourth Year*	
310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 410, 411, 414	1½ or 3*	310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 410, 411, 414	1½ or 3*
330	3	431 & 432	3
261 & 361 or 362 & 363	3	348 & 349	3
Electives	6-7½*	Electives	6-7½*
	15		15

Design

First Year		*Second Year*	
105	3	205	3
110	3	210	1½
120	3	211	1½
English	3	251	1½
Electives	3	252	1½
	15	362 & 363 or 348 & 349	3
		Electives	3
			15
Third Year		*Fourth Year*	
310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 410, 411, 414	1½ or 3*	310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 410, 411, 414	1½ or 3*
351 & 352 or 362 & 363 or 348 & 349	3	351 & 353 or 362 & 363 or 348 & 349	3
330	3	Electives	6-7½*
Electives	6-7½*		15
	15		

Production and Management

First Year		*Second Year*	
105	3	205	3
110	3	210	1½
120	3	211	1½
English	3	251	1½
Electives	3	252	1½
	15	299 or elective	3
		Electives	3
		15	
¤*Third Year*		*Fourth Year*	
305	3	405	3
310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 410, 411, 414	1½ or 3*	310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 410, 411, 414	1½ or 3*
351 & 353 or 362 & 363 or 348 & 349	3	351 & 353 or 362 & 363 or 348 & 349	3
395	3	499	3
Electives	1½ or 3*	Electives	1½ or 3*
	15		15

¤ Interview and permission required.

Theatre/Drama in Education — Elementary

First Year		*Second Year*	
105	3	205	3
110	3	210	1½
120	3	211	1½
Approved English	3	181	3
** Approved elective	3	ED-B 331	1½
	15	** Approved elective	3
		ED-P 197	1½
			15
Third Year		*Fourth Year*	
310, 311, 312, 313, 314, 315, 316, 317, 318 319, 410, 411, 414	1½-3*	310, 311, 312, 313, 314 315, 316, 317, 318 319, 410, 411, 414	1½-3*
382 or 362 & 363 or 348 & 349 or 383	3	381	3
330	3	394	1½
355 & 356 or 362 & 363 or 348 & 349	3	Elective	1½
ED-D 305	3	**Approved electives	6-7½
**Approved elective	0-1½*		15
	15		

** For those wishing to take the Post Degree Professional Program (Elementary) the following courses are required:

Canadian history	3
Mathematics	3
Laboratory science (geography not acceptable)	3

Theatre/Drama in Education — Secondary

First Year		*Second Year*	
105	3	205	3
110	3	210	1½
120	3	211	1½
181	3	Theatre elective	3
Approved English	3	Electives	6
	15		15
Third Year		*Fourth Year*	
310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 410, 411, 414	1½*	310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 410, 411, 414	3*
330	3	355 & 356 or 362 & 363 or 348 & 349	3
383	3	382	3
ED-D 406	3	Electives	6
ED-B 371	3		15
ED-P 398	1½		
	15		

Theatre History

First Year		*Second Year*	
105	3	205	3
110	3	210	1½
120	3	211	1½
English	3	Electives	9
Electives	3		15
	15		

Third and Fourth Years	
310, 311, 312, 313, 314, 315, 316, 317, 318, 319 410, 411, 414,	7½
490	3
Approved electives	6
Electives	13½
	30

* Students are required to take a minimum of 4½ units of Theatre History from this list. Students are reminded that a minimum of 15 units of elective credit must be taken outside the Department.

B.A. HONOURS PROGRAM IN THEATRE HISTORY

The Honours Program normally begins in a student's third year. Students may apply to enter the Honours program after the completion of a minimum of 6 units of course work in Theatre with a G.P.A. in these courses of 5.00 (B) or better. To graduate with a B.A. Honours in Theatre History, a minimum of 30 units of Theatre is required; at least 15 units shall be in designated Theatre History courses at 300 and 400 level listed below, and 6 units in approved, related disciplines.

Designated Theatre History courses are THEA 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 410, 411, 414, 390, 391, 392, 490.

To receive a First Class Honours degree a student must obtain an average of at least A - (7.00) in designated Theatre History courses at 300 and 400 level, and have a graduating average of at least 6.50.

To receive a Second Class Honours degree a student must obtain an average of at least B+ (6.00) in designated Theatre History courses at 300 and 400 level, and have a graduating average of at least 5.00.

A third year Honours student whose performance falls below a G.P.A. of 3.50 in that year, or of 5.00 in designated Theatre History courses, will normally be required to withdraw from the Honours program.

A fourth year student whose graduating grades are lower than the level required for Second Class honours, but who otherwise meets the University's requirements for graduation, will receive a B.F.A. in the Special Program in Theatre History if the B.F.A. requirements have been met.

UNDERGRADUATE COURSES

(Course offering codes: Y = Sept.-Apr., F = Sept.-Dec., S = Jan.-Apr., K = May-Aug., NO = Not offered, this session)

THEA 150 (1½) SPEECH COMMUNICATION
This course is designed to present an overview of the theoretical bases of speech communication, and to develop the vocal, verbal, and non-verbal skills of organization and presentation that are essential in order to communicate effectively. (Required for all Education students. Others may be admitted if space is available. Applicants should attend the first lecture and first lab of the term.) (*Prerequisite:* 15 units of University credit) FS(1-3)

THEATRE HISTORY

***THEA 110 (3) INTRODUCTION TO THE HISTORY AND LANGUAGE OF THE THEATRE**
A survey of the history of western theatre from its beginnings to the closing of the English playhouses in 1642. Early forms, conventions and styles are compared with those of the contemporary theatre. Students are required to attend performances of local theatres. (*Prerequisite:* Permission of the Department) Y(2-0-2)

***THEA 210 (formerly half of 200) (1½) THEATRE FROM FRENCH CLASSICISM TO THE END OF THE 19TH CENTURY**
A survey of western theatre history from Corneille to the Victorians. Introduction to library research methods in theatre history. (*Prerequisite:* 110 or permission of the Department) F(3-0)

***THEA 211 (formerly half of 200) (1½) MODERN THEATRE**
A continuation of Theatre 210 from the late 19th century to the present day. (*Prerequisite:* 210 or permission of the Department)
M.R. Booth S(3-0)

***THEA 310 (1½) SEMINAR IN THEATRE HISTORY: I**
Intensive study of a specific period or genre. The topics for consideration will change each year. Students may take this course for credit more than once. (Students in Arts and Science may take this course once only.) (*Prerequisite:* 211 or permission of the Department)
This year: 19th Century English Theatre.
An examination of the organizational and technical aspects of the 19th century English theatre, including a consideration of the auditorium, stage machinery, scenery, lighting, and production values.
M.R. Booth F(3-0)

***THEA 311 (1½) SEMINAR IN THEATRE HISTORY: II**
Intensive study of a specific period or genre. The topics for consideration will change each year. Students may take this course for credit more than once. (Students in Arts and Science may take this course once only) (*Prerequisite:* 211 or permission of the Department)
This year: August Strindberg
An intensive study of August Strindberg: the man, his life and major dramatic works.
G.W. Hogya S(3-0)

THEA 312 (JAPA 320A) (1½) SEMINAR IN JAPANESE THEATRE AND DRAMA: FROM EARLIEST TIMES TO 1500
This course will study early Japanese drama and theatre from its roots in folk and ritual performance. A majority of time will be spent on the study of No drama and the theoretical writings of Zeami, to be read in translation. This will be supplemented by film, video and audio recordings of theatrical productions. A variety of approaches will be taken in class, including: discussion of the plays as literary texts, dramaturgy, staging and performance techniques. (*Prerequisite:* 211 or permission of the Department) NO(3-0)

THEA 313 (JAPA 320B) (1½) SEMINAR IN JAPANESE THEATRE AND DRAMA: FROM 1500 TO THE PRESENT DAY
This course will focus on Bunraku and Kabuki, but some reading and study will also be made on developments in 20th century theatre. Readings of plays in translation will be supplemented by screenings of videos and films of stage performances. (*Prerequisite:* 211 or permission of the Department) NO(3-0)

***THEA 314 (formerly 306) (1½) STUDIES IN THEATRE OF THE ANCIENT WORLD**
Theatre in ancient Greece or Rome. (Students should consult the Department for the topic to be considered. This course may be taken more than once in different topics, with permission of the Department.) (*Prerequisite:* 211 or permission of the Department) NO(3-0)

***THEA 315 (formerly 307) (1½) STUDIES IN MEDIEVAL THEATRE**
Theatre of the Middle Ages. (Students should consult the Department for the topic to be considered. This course may be taken more than once in different topics, with permission of the Department). (*Prerequisite:* 211 or permission of the Department) NO(3-0)

***THEA 316 (1½) STUDIES IN BAROQUE, ROCOCO AND NEOCLASSICAL THEATRE**
Theatre in the 17th and 18th centuries. (Students should consult the Department for the topic to be considered. This course may be taken more than once in different topics, with permission of the Department.) (*Prerequisite:* 211 or permission of the Department) NO(3-0)

***THEA 317 (1½) STUDIES IN 19th CENTURY THEATRE**
Theatre in the 19th century. (Students should consult the Department for the topic to be considered. This course may be taken more than once in different topics, with permission of the Department.) (*Prerequisite:* 211 or permission of the Department)
This year: Melodrama and Melodramatic Acting
Some Sessions will take the form of workshops, culminating in a class production.
A. Hughes S(3-0)

***THEA 318 (1½) STUDIES IN 20th CENTURY THEATRE**
Modern theatre. (Students should consult the Department for the topic to be considered. This course may be taken more than once in different topics, with permission of the Department.) (*Prerequisite:* 211 or permission of the Department)
This year: American Theatre
A survey of the 20th century American Theatre. This course will emphasize the theatre and drama of Broadway and the regional theatre of the United States from 1940.
H.M. Miller F(3-0)

***THEA 319 (formerly 308) (1½) STUDIES IN RENAISSANCE THEATRE**
The Renaissance in the theatre of Italy, France and England. (Students should consult the Department for the topic to be considered. This course may be taken more than once in different topics, with permission of the Department.) (*Prerequisite:* 211 or permission of the Department) NO(3-0)

***THEA 410 (1½) SEMINAR IN THEATRE HISTORY: III**
Intensive study of a specific period or genre. The topics for consideration will change each year. Students may take this course for credit more than once. (Students in Arts and Science may take this course once only.) (*Prerequisites:* 211 or permission of the Department) NO(3-0)

***THEA 411 (1½) SEMINAR IN THEATRE HISTORY: IV**
Intensive study of a specific period or genre. The topics for consideration will change each year. Students may take this course for credit more than once. (Students in Arts and Science may take this course once only.) (*Prerequisites:* 211 or permission of the Department) NO(3-0)

***THEA 414 (1½, formerly 3) STUDIES IN CANADIAN THEATRE AND DRAMA**
The Canadian theatre and drama. (Students should consult the Department for the topic to be considered. This course may be taken for credit more than once in different topics, with the permission of the Department.) (*Prerequisite:* 211 or permission of the Department) NO(3-0)

ACTING

THEA 120 (3) INTRODUCTION TO THE ART OF ACTING
An orientation to the art of acting and an introduction to the actor's creative process. (*Prerequisite:* Permission of the Department)
M. Gadd Y(1½-3)

THEA 221 (formerly half of 220) (1½) ACTING: I
Work in characterization and scene study. (Enrollment limited) (*Prerequisites:* 120; audition and/or interview; permission of the Department. *Corequisite:* 223 or 225) F(0-2½-2)

THEA 222 (formerly half of 220) (1½) ACTING: II
A continuation of Theatre 221. Work in characterization and scene study. (Enrollment limited) (*Prerequisites:* 221; audition and/or interview; permission of the Department. *Corequisite:* 223 or 225)
J. Krich S(0-2½-2)

THEA 223 (formerly 250) (1½) BEGINNING VOICE
Basic development of the voice to prepare for speech on the stage. (Enrollment limited to 15 students per section) (*Prerequisites:* 120; audition and/or interview; permission of the Department. *Corequisites:* 221 or 222 and 225) FS(0-3)

THEA 225 (formerly 260) (1½) INTRODUCTION TO STAGE MOVEMENT
Basic development of the body to prepare for movement on the stage. (Enrollment limited) (*Prerequisites:* 120; audition and/or interview; permission of the Department. *Corequisites:* 221 or 222 and 223)
K. Piesowocki FS(0-3)

THEA 321 (formerly half of 320) (1½) ACTING: III
The study of acting as related to specific theatrical genres, styles or periods. (*Prerequisites:* 221, 222, 223, 225, audition and/or interview; permission of the Department. *Corequisites:* 323 and 324) F(0-2½-2)

THEA 322 (formerly half of 320) (1½) ACTING: IV
A continuation of Theatre 321. The study of acting as related to specific theatrical genres, styles or periods. (*Prerequisites:* 321; audition and/or interview; permission of the Department) *Corequisites:* 323 and 324)
L. Hardy S(0-2½-2)

THEA 323 (formerly half of 350) (1½) SPEECH IN THE THEATRE: I
Work in voice and speech as related to specific theatrical genres, styles or periods. (*Prerequisites:* 221, 222, 223, 225; audition and/or interview; permission of the Department. *Corequisites:* 321 or 322 and 325 or 326)
F(0-2½-2)

THEA 324 (formerly half of 350) (1½) SPEECH IN THE THEATRE: II
A continuation of Theatre 323. Work in voice and speech as related to specific theatrical genres, styles or periods. (*Prerequisites:* 323; audition and/or interview; permission of the Department. *Corequisites:* 321 or 322 and 325 or 326)
L. Hardy S(0-2½-2)

THEA 325 (formerly half of 360) (1½) STAGE MOVEMENT: I
Work in movement as related to specific theatrical genres, styles or periods. (*Prerequisites:* 221, 222, 223, 225; audition and/or interview; permission of the Department. *Corequisites:* 321 or 322 and 323 or 324)
K. Piesowocki F(0-4½)

THEA 326 (formerly half of 360) (1½) STAGE MOVEMENT: II
A continuation of Theatre 325. Work in movement as related to specific theatrical genres, styles or periods. (*Prerequisites:* 325; audition and/or interview; permission of the Department. *Corequisites:* 321 or 322 and 323 or 324)
K. Piesowocki S(0-4½)

THEA 421 (formerly half of 420) (1½) ACTING: V
Advanced work in special problems in acting. A studio production will normally be mounted each year in either 421 or 422. (*Prerequisites:* 321, 322, 323, 324, 325, 326; audition and/or interview; permission of the Department. *Corequisite:* 423 or 424and 425 or 426)
J. Krich F(0-2½-0)

THEA 422 (formerly half of 420) (1½) ACTING: VI
A continuation of 421. Advanced work in special problems in acting. A studio production will normally be mounted each year in either 421 or 422. (*Prerequisites:* 421; audition and/or interview; permission of the

Department. *Corequisites:* 423 or 424 and 425 or 426)
J. Krich S(0-2½-0)

THEA 423 (formerly half of 450) (1½) SPECIAL STUDIES IN VOICE AND SPEECH FOR THE THEATRE: I
Advanced work in voice production and speech for the stage. (*Prerequisites:* 321, 322, 323, 324, 325, 326; audition and/or interview; permission of the Department .*Corequisites:* 421 or 422 and 425 or 426)
F(0-2½-2)

THEA 424 (formerly half of 450) (1½) SPECIAL STUDIES IN VOICE AND SPEECH FOR THE THEATRE: II
A continuation of 423. Advanced work in voice production and speech for the stage. (*Prerequisites:* 423; audition and/or interview; permission of the Department. *Corequisites:* 421 or 422 and 425 or 426)
S(0-2½-2)

THEA 425 (formerly half of 460) (1½) ADVANCED STAGE MOVEMENT: I
Advanced work in special problems of stage movement. (*Prerequisites:* 321, 322, 323, 324, 325, 326; audition and/or interview; permission of the Department. *Corequisites:* 421 or 422 and 423 or 424)
K. Piesowocki F(0-4½)

THEA 426 (formerly half of 460) (1½) ADVANCED STAGE MOVEMENT: II
A continuation of 425. Advanced work in special problems of stage movement. (*Prerequisites:* 425; audition and/or interview; permission of the Department. *Corequisites:* 421 or 422 and 423 or 424)
K. Piesowocki S(0-4½)

* Approved for elective credit in the Faculty of Arts and Science.

DIRECTING

THEA 330 (3) DIRECTING: I
Fundamental textual analysis; stage composition, movement and rhythm; methods of rehearsal procedure and basic techniques of working with the actor. (*Prerequisites:* 120 or 181 and permission of the instructor)
G.W. Hogya Y(3-2)

THEA 431 (formerly half of 430) (1½) DIRECTING: II
Advanced work in stage direction with particular emphasis on special programs of style. (*Prerequisites:* 330 and permission of the Department)
H. Miller F(3-0)

THEA 432 (formerly half of 430) (1½) DIRECTING: III
A continuation of 431. Advanced work in stage direction with particular emphasis on special problems of style. (*Prerequisites:* 431 and permission of the Department)
H. Miller S(3-0)

DESIGN AND TECHNICAL PRACTICE

THEA 251 (formerly half of 240) (1½) INTRODUCTION TO DESIGN: I
Developing a graphic vocabulary in the free hand idiom for the Theatre Designer. (*Prerequisite:* permission of the Department)
A. Stichbury F(1-3)

THEA 252 (formerly half of 240) (1½) INTRODUCTION TO DESIGN: II
Development of drawing skills in the mechanical idiom. Drafting of ground plans, sections, elevations, orthographics, and isometrics. Mechanical perspective drawing will be explored. (*Prerequisite:* permission of the Department)
A. Stichbury S(1-3)

THEA 261 (formerly half of 241) (1½) INTRODUCTION TO COSTUME DESIGN: I
An introduction to the principles, techniques, and materials of costume design for the stage and other media.
I. Pieper F(3-0)

THEA 266 (1½) THEATRICAL MAKEUP: I
Design and application of stylized theatrical make-up and related simple prosthetics. (Student must purchase the designated make-up kit.) (*Prerequisite:* Theatre 120 or permission of the Department) (Not open to students with credit in 372)
I. Pieper F(3-0)

THEA 348 (formerly half of 342) (1½) LIGHTING FOR THE THEATRE: I
Lighting design; its theory and practice. (*Prerequisites:* 105 and permission of the Department)
G. Hogya F(3-0)

THEA 349 (formerly half of 342) (1½) LIGHTING FOR THE THEATRE: II
A continuation of 348. Lighting design; its theory and practice. (*Prerequisites:* 348 and permission of the Department)
G. Hogya S(3-0)

THEA 351 (formerly half of 340) (1½) INTRODUCTION TO SCENIC DESIGN
Fundamentals of three dimensional design communication and aesthetics. Model making and other graphic techniques for planning, analyzing and describing plastic space for the stage. (*Prerequisite:* 105, 205, 251, 252, and permission of the Department)
A. Stichbury F(2-2)

THEA 352 (formerly half of 340) (1½) SCENIC DESIGN
Paper projects in the design of stage settings. (*Prerequisite:* 351 and permission of the Department)
A. Stichbury S(0-4)

THEA 355 (formerly half of 245) (1½) INTRODUCTION TO DESIGN AESTHETICS
Graphic fundamentals, in both the free hand and mechanical idioms, which are useful to to the theatre practitioner for the interpretation and use of stage design. (This course is not intended for students choosing a special option in Design or in Production and Management) (*Prerequisite:* Permission of the Department)
A. Stichbury F(1-2)

THEA 356 (formerly half of 245) (1½) DESIGN AESTHETICS
The use, interpretation, and communication of stage design through paper and practical projects. (*Prerequisite:* 355 and permission of the Department)
A. Stichbury S(0-3)

THEA 361 (formerly half of 241) (1½) COSTUME DESIGN: II
Costume design for the stage and other media. (*Prerequisite:* 261)
I. Pieper S(3-0)

THEA 362 (formerly half of 341) (1½) COSTUME HISTORY AND DESIGN: I
The history of costume and fashion in society and the theatre from ancient times through the 18th century. Analysis and selected designs for plays set in various historical periods. (*Prerequisite:* 261)
I. Pieper F(4-0)

THEA 363 (formerly half of 341) (1½) COSTUME HISTORY AND DESIGN: II
The history of costume and fashion in society and the theatre in the 19th and 20th centuries. Analysis and designs for selected plays from the period. (*Prerequisite:* 261)
I. Pieper S(4-0)

THEA 364 (1½) THE THEORY AND PRACTICE OF COSTUME PATTERN DRAFTING
Flat pattern drafting and draping for theatrical costumes.
I. Pieper F(3-0)

THEA 366 (1½) THEATRICAL MAKEUP: II
History, theory and design of realistic theatrical make-up and related simple prosthetics. (Students must purchase the designated make-up

kit.) (*Prerequisites:* THEA 266) (Not open to students with credit in 372)
I. Pieper S(3-0)

THEA 464 (formerly 441) (1½) SPECIAL PROBLEMS IN COSTUME DESIGN
Special problems in costume design, costume accessories, fabric dying. (*Pre-* or *corequisites:* 261, 361, 364)
I. Pieper S(3-0)

THEA 465 (formerly ½ of 444) COSTUME DESIGN FOR PRODUCTION
Supervised design and production in the execution of costumes for theatre production. Students will work with directors on design concepts, carry out research and write reports on their findings; they will then prepare designs and see them through the construction process into production. (May be taken for credit more than once, up to a limit of six units) (*Pre- or corequisites:* 361, 362, 363, 364)
I. Pieper FS(2-1)

PRODUCTION AND MANAGEMENT

THEA 105 (3) AN INTRODUCTION TO STAGECRAFT AND TECHNICAL PRACTICE
Elementary principles of scenery and costume construction, and of stage lighting. Students will be required to participate as production crew in Department productions. (*Prerequisite:* Permission of the Department)
B. Kinghorn Y(1-4)

THEA 205 (3) AN INTRODUCTION TO PRODUCTION AND MANAGEMENT AREAS OF THE THEATRE
Students are instructed in the basic principles and procedures of the major production and management areas of the theatre. Intensive applications in one or more areas are studied. Students will be required to participate as production crew in Department or other designated productions. (Students enrolled in this course must consult the instructor before making evening or lunchtime engagement which might interfere with the schedule of practical assignments.) (*Prerequisites:* 105 and permission of the Department)
G. Timmermans Y(1-4)

THEA 305 (1½ or 3) ADVANCED PRODUCTION AND MANAGEMENT
Students are instructed and given practical experience in one or more of the major production and management areas of the theatre. These may include: costume, stage management, technical direction, sound design, lighting operation, stage carpentry, front of house, publicity. (Enrollment limited) (*Prerequisites:* 205 and permission of the Department)
B. Kinghorn Y(0-6-2)

THEA 405 (1½ or 3) SPECIALIZED STUDIES IN PRODUCTION AND MANAGEMENT
Supervised practical experience in one or two specialized areas of production and management in the theatre. (Enrollment limited) (Students may take this course for credit more than once in different topics.) (*Prerequisites:* 305 and permission of the Department)
G. Timmermans Y(0-6-2)

THEATRE/DRAMA IN EDUCATION

THEA 181 (3) AN INTRODUCTION TO THE DRAMATIC PROCESS
A course designed for students considering a career in which presentation of self and personal communication are necessary components. This course unites dramatic exploration and theatre forms to develop personal confidence, creative and communication skills through dramatic exploration of games, verbal and nonverbal signalling, role playing and improvisation. Study of texts will be required. (Enrollment limited to 25 students per section)
J.M. Saxton Y(1-4)

THEA 381 (3) DRAMA IN EDUCATION (Grades K-VII)
A course designed for teachers who wish to use Drama as a method of instruction in the elementary school. A study of a dramatic approach to the teaching of language arts, mathematics and social studies; and an exploration of movement, sound, art and music. Examination of methodology, teaching strategies and unit designs. (*Prerequisites:* 181 and permission of the Department. *Pre-* and *corequisites:* 330, ED-B 331, ED-D 305 or permission of the Department)
J.M. Saxton Y(2-2)

THEA 382 (3) DRAMATIC ARTS IN THE SECONDARY SCHOOL (Grades VIII-I)
A course designed for those teachers who wish to teach Drama as a subject, or to use Drama as a teaching method. This course is intended to bridge the gap between dramatic exploration and dramatic presentation. Game theory, improvisation, role playing, Readers' Theatre, Story Theatre, Anthology and Docudrama. An examination of methods, teaching strategies, and curriculum design with emphasis upon theory, objectives, and extracurricular Drama. (*Prerequisite:* 181) (*Pre-* and *corequisites:* 330, ED-B 471, ED-P 398, ED-D 406 or permission of the Department)
J.M. Saxton Y(2-2)

THEA 383 (3) THEATRE FOR YOUNG AUDIENCES
The history and philosophy, production and performance of theatre for young audiences. This course is designed for teachers who see theatre as a stimulus for classroom learning, and for performance students who wish to acquire skills required for work with classroom audiences. Studio work is required. (*Prerequisites:* 330 and permission of the Department)
J.M. Saxton Y(2-2)

DIRECTED STUDIES

NOTE: Directed Studies may, with the permission of the Department, be taken for credit more than once.

Students wishing to pursue a course of directed studies must, with a faculty member who is willing to supervise such a course, formulate a proposal accurately describing course content, the intended method and extent of supervision, and the method by which work will be evaluated. The proposal must then receive the approval of the Chair of the Department.

Proposals will normally be subject to the following limitations: the student must have maintained a good G.P.A. and an average of at least B+ in courses directly related to the proposed directed studies; no more than 9 units of directed studies credit will count for credit towards the B.F.A.; no more than 6 units of directed studies will be approved in any single winter session.

THEA 299 (1½ or 3) THEATRE LABORATORY
Under the supervision of faculty, students will participate in projects that will include both their particular areas of interest and other aspects of the theatre. (2-2)

****THEA 390 (1½ or 3) DIRECTED STUDIES IN THEATRE HISTORY**
(*Prerequisites:* 210, 211, and/or permission of the Department)

****THEA 391 (1½ or 3) DIRECTED STUDIES IN THE HISTORY OF DRAMA**
(*Prerequisites:* 210, 211, and/or permission of the Department)

****THEA 392 (1½ or 3) DIRECTED STUDIES IN THEORIES OF ACTING**

****THEA 393 (1½ or 3) DIRECTED STUDIES IN THEORIES OF DIRECTING**
(*Prerequisites:* 210, 211, 330, and/or permission of the Department)

****THEA 394 (1½ or 3) DIRECTED STUDIES IN THEATRE/DRAMA IN EDUCATION**
Individual, supervised research in theatre/drama in education culminating in the production of a specific project either written or practical.

THEA 395 (1½ or 3) DIRECTED STUDIES IN PRODUCTION AND/OR MANAGEMENT

THEA 396 (1½ or 3) DIRECTED STUDIES IN SCENE DESIGN
(*Prerequisites:* 251, 252, 351, 352, and permission of the Department)

THEA 397 (1½ or 3) DIRECTED STUDIES IN COSTUME DESIGN
(*Prerequisites:* 362, 363, 364, 464, and permission of the Department)

THEA 398 (1½ or 3) DIRECTED STUDIES IN LIGHTING DESIGN
(*Prerequisites:* 348, 349, and permission of the Department)

THEA 399 (1½ or 3) THEATRE LABORATORY
Under the supervision of faculty, students will participate in projects that will include both their particular areas of interest and other aspects of the theatre. Supervised performance in department productions will normally be available for credit only to students in the acting specialization. (2-2)

THEA 490 (1½ or 3) GRADUATING PROJECT
Students in their final year may take a special project under this number according to their areas of interest and with the permission of the Department.

THEA 499 (1½-6) THEATRE LABORATORY
Under the supervision of faculty, students will participate in projects that will include both their particular areas of interest and other aspects of the theatre. Supervised performance in department productions will normally be available for credit only to students in the acting specialization. (2-2)

**Students in Arts and Science may take for elective credit only one of the five directed studies courses.

DEPARTMENT OF VISUAL ARTS

Mowry Baden, B.A. (Pomona), M.A. (Stan.), Professor (Sculpture) and Chair of the Department
Douglas G. Morton, R.C.A., Professor (Painting)
Pat Martin Bates, Dip. Royale (Académie Royale des Beaux Arts, Antwerp), R.C.A., Professor (Printmaking)
Roland Brener, Post Dip. A.D. (St. Martin's Sch. of Art, Lond.), Professor (Sculpture)
Donald Harvey, A.T.D. (Brighton), R.C.A., Professor (Drawing and Painting)
Gwen Curry, B.F.A., (U. of Vic.), M.F.A., (Ariz. St.), Associate Professor (Printmaking and Drawing)
Fred Douglas, Associate Professor (Photography)
George W. Tiessen, B.F.A. (Mt. All.), M.F.A. (Corn.), Associate Professor (Printmaking and Painting)
Lynda Gammon, B.A. (S. Fraser), M.F.A. (York), Assistant Professor
Patrick George, B.F.A. (U. of Vic.), Senior Academic Assistant

Visiting Appointments:
Charlotte T. Gault, B.A. (Sus.), Ph.D. (Lond.), Visiting Assistant Professor (1991)
Elspeth Pratt, B.A., B.F.A. (Man.), M.F.A. (Brit. Col.), Visiting Assistant Professor (1991)
Robert Youds, B.F.A. (U. of Vic.), M.F.A. (York), Visiting Assistant Professor (1990-91)

GRADUATE PROGRAM

For information on studies leading to the M.F.A. Degree, see page 291.

GENERAL INFORMATION

The Department offers two undergraduate programs leading to the degree of B.F.A., Honours or Major, and a two year graduate program leading to an M.F.A.

The academic emphasis of the Department is on contemporary art practices, rather than applied or craft training. The program is designed to provide intensive studio experience in a critical setting pertinent to the pursuit of art in our culture. Studies are enriched by visiting artists and critics and the presence of graduate students from Canada and abroad. In addition to the regular program, the Department offers several courses each summer which are staffed by notable visiting artists.

ADVICE FOR STUDENTS ENTERING THE DEPARTMENT FOR THE FIRST TIME

1. From secondary school
Complete the usual procedures for admission to the University, as specified elsewhere in this Calendar as well as the Visual Arts Admissions Questionnaire. Return the questionnaire as soon as possible. (Late applications will be considered depending on space available and providing that the general application for UVic has been met.)

Students intending to pursue a degree program in Visual Arts should declare that intention by registering in the faculty of Fine Arts.

2. Transfer from other universities, colleges, and art schools
Complete the usual procedures for admission to the University, as specified elsewhere in this Calendar. The Director of Admission Services will consult the Department for advice on transfer credit for studio courses completed elsewhere. (Note: normally students will not be admitted into third and fourth year studio courses until their outside elective requirements for first and second year have been met.)

3. From other programs at the University of Victoria
Complete the usual procedures for reregistration, as specified elsewhere in this Calendar as well as the Visual Arts Admissions Questionnaire. Return the questionnaire as soon as possible.

UNDERGRADUATE PROGRAMS

Students who are working towards the B.F.A. degree have the choice of an Honours or a Major program. This permits a choice between an intensive commitment to visual arts (normally 34½ visual arts course units from a degree total of 60); or a combination of visual arts and other University offerings (as few as 28½ visual arts course units from a degree total of 60).

Note: All visual arts studio courses involve a minimum of 3 hours of out of class studio time. Department facilities are available for completion of studio projects.

HONOURS PROGRAM

Students must normally complete 34½ units of Department offerings as specified below. Of the total of 60 units, at least 21 units must be chosen from outside the Department of Visual Arts, including 6 units of History in Art. There is also a weekly 1½ hour seminar requirement which is mandatory for all Honours students. To qualify for the Honours Program a student must have completed 6 units of studio courses at the 300 level (where available) in the chosen discipline, have a B+ average in three third year Visual Arts studio courses, have a first class average in the course or courses identified as prerequisite to the discipline, and permission of the department. No more than 6 units of other course work may be taken with Art 499.

Note: It is the expectation that, as well as the weekly conference time with the adviser the student will spend a minimum of 24 hours per week in the studio.

First and Second Year
Visual Arts Courses

100*	1½
101*	1½
150	1½
3 of 110-140	4½
3 of 200-240	4½

*Mandatory courses in first year

First and Second Year
Outside Electives

History in Art**	3
Other electives	9
Art *or* electives	4½

** The required 6 units of History in Art may be elected at any time during the 4 years, however students are strongly advised to complete 3 of those 6 units in their first or second year.
(Note: Normally students will not be admitted into third and fourth year studio courses until their outside elective requirements for first and second year have been met.)

Third and Fourth Year Visual Arts Courses

300-390	9
499	12

Third and Fourth Year Outside Electives

Electives (any level)	9

(Note: electives must include History in Art requirement)
Of the total 60 units, at least 21 units must be chosen from courses numbered 300 or above.

A student who passes all courses but fails to obtain a second class graduating average (3.50) will graduate in the Major Program.

*** A general University of Victoria regulation requires all students either to pass the qualifying examination in English or to complete certain English courses (see page 13).

Note 1: 390 and 490 may not be taken concurrently
Note 2: Neither 390 nor 490 may be taken concurrently with 499.

MAJOR PROGRAM

Students must normally complete 28½ units of Department offerings as specified below. At least 24 units must be chosen from outside the Department of Visual Arts, including 6 units of History in Art. Of the total 60 units, at least 21 must be chosen from courses numbered 300 or above.

First and Second Year Visual Arts Courses

100*	1½
101*	1½
150	1½
3 of 110-140	4½
3 of 200-240	4½

*Mandatory courses in first year

First and Second Year Outside Electives

History in Art **	3
Other electives	12
Art *or* electives ¤	1½

** The required 6 units of History in Art may be elected at any time during the 4 years, however students are strongly advised to complete 3 of those 6 units in their first or second year.
(Note: Normally students will not be admitted into third and fourth year studio courses until their outside elective requirements for first and second year have been met.)

Third and Fourth Year Visual Arts Courses

300-490	15

Third and Fourth Year Outside Electives

electives ¤	9
Art *or* electives	6

(Note: electives must include History in Art requirement.)

¤ Of the total 60 units, at least 21 units must be chosen from courses numbered 300 or above.

*** A general University of Victoria regulation requires all students either to pass the qualifying examination in English or to complete certain English courses (see page 12).

Note 1: 390 and 490 may not be taken concurrently.
Note 2: Neither 390 nor 490 may be taken concurrently with 499.

COURSES

(Course offering codes: Y = Sept.-Apr., F = Sept.-Dec., S = Jan.-Apr., K = May-Aug., NO = Not offered, this session)

ART 100 (1½ formerly 3) STUDIO FOUNDATION
A course focusing on the processes and ideas associated with the creation of art. In a studio setting students will be encouraged to explore a series of related ideas, questions and problems using verbal and experimental methods. (Priority is given to students registered in the B.F.A. program in Visual Arts.) FS(0-3)

ART 101 (formerly half of 200) (1½) DRAWING
This course is intended to increase drawing skills and to introduce drawing as a means of dealing with visual concepts and problems. (*Pre- or corequisite:* 100) FS(0-3)

ART 110 (formerly half of 210) (1½) PAINTING
A studio introduction to painting and related areas. (*Pre- or corequisites:* 100 and 101) F(0-3)

ART 120 (formerly half of 220) (1½) SCULPTURE
An introduction to concerns and methods in contemporary sculpture. Students will experience a broad range of studio practices as well as explore theoretical issues. Short projects and critiques are the standard format for this class. (*Pre- or corequisites:* 100 and 101) F(0-3)

ART 130 (1½) PRINTMAKING
An introductory course involving basic relief printmaking techniques which may include the collograph, woodcut, linocut, drypoint, etching or lithograph. (*Pre- or corequisites:* 100 and 101) F(0-3)

ART 140 (formerly half of 240) (1½) PHOTOGRAPHY
This course concerns the distinctive quality of the photograph. Basic darkroom procedures and camera techniques are dealt with in this context. (Students must supply their own camera.) (*Pre- or corequisites:* 100 and 101) F(0-3)

*** ART 150 (1½) BASIC ART THEORY**
A lecture course introducing the terms and concepts necessary for an understanding of contemporary art. (Priority is given to students registered in the B.F.A. program in Visual Arts.) S(3-0)

ART 200 (1½ formerly 3) DRAWING
This course is intended to increase drawing skills and to introduce drawing as a means of dealing with visual concepts and ideas. (*Prerequisites:* 100 and 101) FS(0-3)

ART 210 (1½ formerly 3) PAINTING
An extension of 110. (*Prerequisites:* 100, 101 and 110) S(0-3)

ART 220 (1½ formerly 3) SCULPTURE
A continuation of 120. Students will develop an ability to work independently in the sculpture area by the completion of this course. (*Prerequisites:* 100, 101 and 120) S(0-3)

ART 231 (1½) (formerly half of 331) SCREENPRINTING (Silkscreen)
An introduction to screen printing; exploration of all stencil methods, including photo screen, with the aim of producing original prints. (*Prerequisites:* 100, 101 and 130) (N.B. May be taken concurrently with 232 or 233 but not both) S(0-3)

ART 232 (1½ formerly 3) INTAGLIO
An introductory studio course in the history and techniques of various intaglio processes including etching, engraving, aquatint, mezzotint, dry point and metal collage. (*Prerequisites:* 100, 101 and 130) (N.B. May be taken concurrently with 231 or 233 but not both) S(0-3)

ART 233 (1½ formerly 3) LITHOGRAPHY
An introduction to stone and metal plate lithography. (*Prerequisites:* 100, 101 and 130) (N.B. May be taken concurrently with 231 or 232 but not both) S(0-3)

ART 240 (1½ formerly 3) PHOTOGRAPHY
A continuation of 140, including both practical and theoretical aspects of photography. (Students must supply their own camera.) (*Prerequisites:* 100, 101 and 140) S(0-3)

Normally before admission to any 300 level art course, Visual Arts

students should have completed a minimum of 9 units of outside electives and their program requirements of 100 and 200 level art courses.

ART 300 (3) DRAWING

ART 301 (3) DRAWING

These courses are intended to increase further the students comprehension of mark making and its meaning. The emphasis will be on the development of a personal statement and the exploration of drawing as an art form in its own right. (Concurrent registration in both permitted) (*Prerequisites:* 100, 101 and 200) Y(0-3)

ART 302 (3) ADVANCED DRAWING

This course is a continuation of 300 and 301 with emphasis on a directed study approach. (*Prerequisite:* 300 or 301) Y(0-3)

ART 310 (HA 310) (1½ or 3) MEDIA AND METHODS

An examination of the techniques employed by artists throughout history. Areas of special emphasis may include architecture, drawing, painting, photography, printmaking, sculpture, and the various media used in the decorative arts, in Western and non-Western cultures. Historical, geographical, social and economic factors in the development of art technology are considered, together with the interrelation of ideas with material and techniques. Each course will consist of a series of lectures, demonstrations, museum and gallery visits as appropriate. Period and area of emphasis at the discretion of the instructor. (As the emphasis may vary from time to time, the course may be taken for credit more than once, with permission of the Department.) (*Prerequisite:* HA 120 or permission of the Department) NO(3-0)

ART 311 (3) PAINTING

ART 312 (3) PAINTING

Advanced courses in painting. (It is not necessary that these courses be taken in sequence. Concurrent registration in two of these courses is permitted.) (*Prerequisites:* 110 and 210) Y(0-3)

ART 313 (3) ADVANCED PAINTING

A continuation of 311 and 312 with emphasis on a directed studies approach. (*Prerequisite:* 311 or 312) Y(0-3)

ART 321 (3) SCULPTURE Y(0-3)

ART 322 (3) SCULPTURE Y(0-3)

ART 323 (3) SCULPTURE NO

Advanced courses in sculpture. (It is not necessary that these courses be taken in sequence. Concurrent registration in two of these courses is permitted.) (*Prerequisites:* 120 and 220)

ART 332 (3) ADVANCED INTAGLIO

An advanced studio course in the various intaglio methods with emphasis on the exploration of contemporary printmaking as an artform and the development of a personal concept and imagery. Students will have the opportunity to experiment with divergent modes of mixed media, such as the monoprint, chine colle, collograph, photo etching, relief and lift-ground etching, mezzotint and viscosity colour printing and their various combinations with a view to enhancing visual acuity and tactility. Y(0-3)

ART 333 (3) ADVANCED LITHOGRAPHY

An advanced studio course which will focus on colour and plate lithography and place more emphasis on the student's personal imagery. (*Prerequisites:* 130 and 233) Y(0-3)

ART 341 (3) PHOTOGRAPHY Y(0-3)

ART 342 (3) PHOTOGRAPHY NO(0-3)

An extension of 240. More advanced techniques and an emphasis on developing individual concerns. (Students in these classes must have their own camera.) (It is not necessary that these courses be taken in sequence. Concurrent registration in both is permitted.) (*Prerequisites:* 140 and 240)

*** ART 350 (3) CONTEMPORARY ART THEORY AND PRACTICE**

This course does not deal with the history of contemporary art. It aims rather at introducing the student to the contexts — social, political, economic, intellectual — in which the artist operates today. Among concepts explored are: the artist and the state, society and the artist, the economics of art, art and politics, art and philosophy, art and psychology, art and psychoanalysis, artist and critic, the education of the artist, fashions in theory (Freud, Jung, Marx, Kierkegaard, Zen, Sartre, Wittgenstein, Structuralism, etc.) (*Prerequisite:* 150 or permission of the Department) (NOTE: This lecture course is not considered a studio prerequisite for entry into other department courses) NO(3-0)

ART 390 (3) DIRECTED STUDIES

(*Prerequisite:* A B+ average in the 6 units of credit in the specialized area of study at least 3 units of which must be at the third year level, and permission of the Department) (Note: it is the expectation that, as well as the weekly conference time with the adviser the student will spend a minimum of 3 hours per week in the studio)

ART 480 (6) ADVANCED STUDIO

An intensive course designed for Major students in their graduating year from all discipline areas of the department. Under the direction of a Course Director and with the participation of faculty, seminars and group critiques will constitute a component of this course.

Students will be expected to propose a program of study and select a Faculty Adviser. The option of pursuing work in their chosen area or working in a multidisciplinary program is available. (Outside reading will be required.) (*Prerequisite:* 6 units of 300 level studio courses) Y(0-6)

ART 490 (3) DIRECTED STUDIES

(*Prerequisite:* 6 units of credit in the specialized area of study, at least 3 units of which must be at the third year level, and permission of the department. Normally for Major students only.)

(Note: It is the expectation that, as well as the weekly conference time with your advisor, you will spend a minimum of 3 hours per week in the studio.)

Note: Students may not take a 3rd year course and a directed studies with the same instructor in the same discipline in the same year.

ART 499 (12) SENIOR PROJECT

The senior project is the major component in the B.F.A. Honours Degree Program. Each student taking 499 works under the supervision of a faculty member. In addition to this regular contact there are two formal critiques of each student's work per semester at which three faculty members must be present. There is also a weekly 1½ hour Seminar requirement which is mandatory for all students undertaking this Senior Project. To qualify for the Honours Program a student must have completed 6 units of studio courses at the 300 level (where available) in the chosen discipline, have a B+ average in three third year Visual Arts studio courses, have a first class average in the course or courses identified as prerequisite to the discipline, and permission of the department. No more than 6 units of other course work may be taken with Art 499. Note: it is the expectation that, as well as the weekly conference time with the adviser the student will spend a minimum of 24 hours per week in the studio. The year culminates in the 499 Graduating Exhibition which is held in April of each year and is the final accomplishment of students in the Honours Program. The senior project presents an opportunity to students who have a firm commitment to their chosen area of study and the ability to work independently under supervision. Available subjects are: Painting, Drawing, Sculpture, Printmaking and Photography.

* Approved for elective credit in the Faculty of Arts and Science.

FACULTY OF GRADUATE STUDIES

Alexander McAuley, B.Sc., Ph.D., D.Sc. (Glas.), C.Chem., M.R.S. Chem., Dean of the Faculty (to June 30, 1991)
Bruce L. Howe, B.S., M.S., Ph.D. (Ore.), Associate Dean
Christopher R. Barnes, B.Sc. (Birm.), Ph.D. (Ott.). FRSC Director, Centre for Earth and Ocean Research
Kevin D. Paul, B.A., B.A., M.A. (U. of Vic.), Director, Graduate Admissions and Records
Ann Nightingale, B.Sc. (U. of Vic.), Admissions Officer

EXECUTIVE COMMITTEE:

Members:

Alexander McAuley, B.Sc., Ph.D., D.Sc., Dean of the Faculty of Graduate Studies, Chair
Bruce L. Howe, B.S., M.S., Ph.D., Associate Dean of the Faculty of Graduate Studies

Representing the Humanities
Patricia E. Roy, B.A., M.A., Ph.D., Department of History. Term expires October 1992

Representing Education
Max R. Uhlemann, B.S., M.S., Ph.D., Department of Psychological Foundations in Education. Term expires October 1992

Representing Engineering
Ruediger Vahldieck, Ing., Dipl.-Ing., Dr.-Ing., Department of Electrical and Computer Engineering. Term expires October 1992

Representing Fine Arts
Alan Hughes, B.A., M.A., Ph.D., Department of Theatre. Term expires October 1991

Representing Human and Social Development
James J. McRae, B.A., M.A., Ph.D., School of Public Administration. Term expires October 1992

Representing the Sciences
C. Robert Miers, B.A., M.A., Ph.D., Department of Mathematics and Statistics. Term expires October 1992

Representing the Social Sciences
Daniel J. Koenig, A.B., M.S., Ph.D., Department of Sociology. Term expires October 1991.

REGULATIONS

The regulations shown below have been approved by the Senate of the University of Victoria. Students registered in the Faculty of Graduate Studies are subject to such other general regulations of the University as the Senate or Board of Governors, on the recommendation of the Faculty of Graduate studies, may wish to apply.

The regulations are listed under the following general headings:

1.0 Admission
2.0 Registration Procedures and Status
3.0 Student Responsibility
4.0 Academic Standing
5.0 Academic Standards for Graduate Degree Programs
6.0 Cooperative Education Option
7.0 Interdisciplinary Programs
8.0 Graduate Programs by Special Arrangement
9.0 Appeal Procedure
10.0 Research Services
11.0 Transcript Requests
12.0 Work Permits

APPROVED GRADUATE PROGRAMS

The Faculty of Graduate Studies of the University of Victoria administers programs leading to the degree of:

Master of Applied Science
Master of Arts
Master of Education
Master of Engineering
Master of Fine Arts
Master of Music
Master of Public Administration
Master of Science
Doctor of Philosophy

Details of established programs leading to Master's or Doctoral degrees are provided within the departmental listings. Degrees may also be taken with a cooperative education option, with an interdisciplinary focus, or by "special arrangement", as outlined below.

1.0 ADMISSION

The requirements for admission to the Faculty of Graduate Studies include an academic standing acceptable to the Faculty of Graduate Studies and the department concerned; satisfactory assessment reports; the availability within the department concerned of a supervisor and of adequate space and facilities. Students may enter the Faculty in September, January, May or July; however, some programs have restricted entry points. Departmental entries should be consulted for details.

There is an application fee of $20. This applies to all applicants — including foreign students. It is non-refundable and will not be credited towards tuition fees. Applications will not be processed unless the application fee is received. Payment must be made in Canadian funds drawn on a Canadian bank, or U.S. funds drawn on a U.S. bank.

Applications for admission must be submitted as early as possible on forms obtained from the Graduate Admissions & Records Office, Main Floor, University Centre. No assurance can be given that applications received after May 31 can be processed in time to permit registration in the Winter Session. Applicants who have attended other postsecondary institutions must arrange with those institutions to forward two official transcripts directly to the Graduate Admissions & Records Office. Submission of University of Victoria transcripts is not required; they will be provided by the Graduate Admissions and Records Office. Also, most applicants must arrange to have two assessment reports sent to the same office on forms supplied with the application. These reports are verified on a routine basis. If the Graduate Admissions and Records Office receives evidence that any documentation submitted as part of the application has been forged or falsified in any way, the applicant will be permanently banned from the University of Victoria. A warning will also be circulated to all other Canadian universities.

Applicants for University of Victoria Graduate Fellowships must have all materials submitted to the Graduate Admissions and Records Office by February 15 in order to be guaranteed consideration.

Students who have been admitted to the Faculty of Graduate Studies should confirm within one month that they intend to accept the offered place. If this is not done, then the admission may be cancelled and the place reassigned.

Foreign students should not make travel plans until they have been granted official admission (not provisional admission) and have satisfied all student authorization requirements through the Canadian Consulate in their home country. Allow at least eight weeks for visa application procedures.

1.1 English Requirements for Foreign Students

1.1.1 Test of English as a Foreign Language (T.O.E.F.L.)

Applicants for admission whose first language is not English, and who have resided in Canada or other English speaking countries for less than three consecutive years immediately prior to the beginning of the session applied for, must take the Test of English as a Foreign Language (T.O.E.F.L.). The minimum acceptable score is 550. Individual departments may require more than the Faculty minimum; applicants should check with the relevant department. Official offers of admission can only be given after the Graduate Admissions and Records Office has received a copy of the Official Score Report directly from the testing agency. Examinee's Score Records and photocopies are not acceptable. Applicants should note in their Bulletin of Information for T.O.E.F.L. that scores older than two years are not retained by the testing agency. Such scores cannot be reported by the testing agency, nor can they be verified by universities. Therefore, scores older than two years are not acceptable.

Information concerning the T.O.E.F.L., and the times and places at which it is administered, may be obtained by writing to "Educational Testing Service, Princeton, N.J. 08540, U.S.A," or by writing directly to "Counselling Services, University of Victoria, P.O. 3025, Victoria, B.C. V8W 3P2, Canada."

1.1.2 English Course for Foreign Graduate Students

All newly admitted foreign students who were required to submit a T.O.E.F.L. score as part of the admissions process are required to register in a special English proficiency course offered by the Division of University Extension. Students will be notified of the details of the course after they have been admitted. If students feel that they should be exempted from such a course, they should appeal directly to the Dean of Graduate Studies after they arrive on campus.

1.2 GRE Requirement for Graduate Studies

The Graduate Record Examination (GRE) is prepared and scored by the GRE Board and Educational Testing Service, Princeton, New Jersey. Applications are available from "Graduate Record Examinations, Box 955, Princeton, N.J. 08541" or from "Counselling Services, University of Victoria". It is used widely by Universities to supplement undergraduate records and other qualifications for admission to graduate study.

GRE requirements are prescribed by individual departments. In some instances, completion of the examination is mandatory. Applicants are advised to check department listings for detailed information. However, the Faculty reserves the right to require a GRE score (on Advanced and Aptitude Tests), for any applicant. Voluntary submission of a GRE score may facilitate the admission process.

1.3 Admission to Master's Degrees

1.3.1 In general, an acceptable academic standing will be a four year (60 academic University of Victoria units) baccalaureate degree (or equivalent) from a recognized institution. A grade point average of at least 5.00 (B) in the work of the last two years (30 units) leading to this baccalaureate degree is required for entry. Higher entrance standards than those outlined in this section may be set by individual departments.

"Practicum", "curriculum and instruction", and "activity" courses as well as credit granted on the basis of "life" or "work" experience, cannot be used to satisfy the 60 academic unit requirement described above, and grades on such courses will not be used in the calculation of the entering grade point average. Any courses used in the calculation of the entering average cannot be used as credit toward a graduate degree program.

1.3.2 Evidence is required, in the form of two assessment reports, submitted directly to the Graduate Admissions and Records Office from qualified referees, of the student's ability to undertake advanced work in the area of interest.

1.4 Admission to the Master's degree as a Conditionally Admitted Mature Student

Five years after completion of a baccalaureate degree as defined in 1.3.1, applicants whose academic record is such that they would not be admissible to a Master's program may be admitted conditionally as mature students, provided they are recommended by the department and have five years of relevant professional experience. Such recommendations must be made in writing by the Department/School and approved by the Faculty of Graduate Studies Admissions Committee.

A minimum of 9 units of senior undergraduate or graduate course work with no less than a cumulative grade point average of 5.00 (B) and a grade of at least B- in each course is required before reregistration in a Master's program can be approved by the Faculty. When the student has satisfied this condition and has been authorized for the Master's program, courses taken as part of this nine units can be applied toward the graduate degree when the Master's program form is submitted to the Faculty.

Students admitted in this category cannot receive transfer credit for any courses completed prior to enrolling in the Faculty of Graduate Studies.

1.5 Admission to the Doctoral Degree

1.5.1 Admission to a Doctoral degree program normally requires a Master's degree (or equivalent) from a recognized institution.

1.5.2 Admission without a Master's degree requires a baccalaureate degree as defined in 1.3.1 from a recognized institution with a cumulative grade point average of 6.50 (A-), or the completion of at least two terms in a Master's programme at this University.

1.5.3 Transfer from a Master's to a Doctoral program may be recommended to the Dean of Graduate Studies after an evaluation of the candidate by the department concerned. Departmental entries should be consulted for details on the establishment of transfer eligibility. Requests for transfer will be considered at any time after two terms in a Master's program, but if a transfer takes place after student has been in a Master's program for 16 consecutive months from the start of the date of the Master's program, only those fee installments paid during the first 16 months will be applied to the 7.5 fee installments required for the Ph.D.

1.5.4 Admission to a Doctoral program requires evidence that the applicant is capable of undertaking substantial original research. Such capability will be judged from two assessment reports sent directly to the Graduate Admissions and Records Office from qualified referees, and the completion of a Master's thesis or other scholarly work. Students who are recommended for transfer to the Doctoral program are exempted from this requirement.

1.5.5 All Doctoral students are admitted as provisional candidates until they have passed their candidacy examinations, at which time they are automatically classified as candidates for the degree of Doctor of Philosophy. See regulation 5.6.

1.6 Admission to Nondegree Course Work

"Nondegree" graduate students are taking courses in the Faculty of Graduate Studies, but not for credit toward a degree at the University of Victoria. Such students are admitted under one of three categories defined in 1.6.1, 1.6.2 and 1.6.3.

1.6.1 "Visiting" graduate students on a Letter of Permission which specifies courses allowed for credit toward a graduate degree at another university. Applicants under this category should complete an application for admission and provide a Letter of Permission from their home institution. No other supporting documentation is required.

1.6.2 "Exchange" graduate students on a Letter of Permission issued by the Dean of Graduate Studies of a western Canadian university under the provisions of the Western Deans' Agreement. If a student is admitted as an "exchange" student, all tuition fees will be waived; however, student fees will still be charged. Applicants under this category should submit a completed application for admission and documentation from the Dean of Graduate Studies at their home institution certifying the applicant as an "exchange" student under the provisions of the Agreement. Courses to be taken toward their degree should be specified in the documentation. No other supporting material is required.

1.6.3 "Nondegree" students who wish to improve their academic background. Applicants under this category who do not hold a Master's degree must meet the same entrance requirements and follow the same application procedure as outlined in 1.0 and 1.3. Holders of a Master's degree (or equivalent from a recognized institution) in the same discipline as the course work applied for should complete an application for admission, and provide proof of conferral of the Master's degree.

1.6.4 If a student admitted as a nondegree student is later admitted to a graduate degree program, no more than 3.0 units of course work taken as a nondegree student may be applied to the graduate program subject to the recommendation of the supervisory committee and the approval of the Dean of Graduate Studies.

1.6.5 None of the fees paid as a nondegree student may be applied to the graduate degree. Fees for courses taken as a nondegree student will be charged on a per unit basis as outlined in the section entitled "FEES FOR GRADUATE PROGRAMS" (with the exception of Exchange students as described in 1.6.2 above).

1.7 Admission to a Second Master's or Doctoral Degree

Under the following conditions, a student who has a Master's or Doctoral degree from the University of Victoria or the equivalent from a recognized institution may be allowed to pursue graduate studies leading to a second Master's or Doctoral degree:

1.7.1 The student must be admissible to the program.

1.7.2 The principal area of study or academic emphasis of the second degree must be distinct from that of the first degree.

1.7.3 At least 15 (for the Master's degree) or 30 (for the Doctoral degree) units of credit must be completed beyond those units required in the previous degree.

1.7.4 The student must meet all program and graduation requirements for the second degree beyond those required for the first degree.

1.7.5 Graduate degree programs within the Faculty of Graduate Studies cannot be taken concurrently.

1.7.6 None of the research done for the first degree shall be used for the second degree; as well, the supervisor for the first degree cannot be nominated to supervise the second degree.

1.7.7 None of the time spent in residence for the first doctoral degree shall count toward the residency requirement for the second doctoral degree.

1.8 Permission for Undergraduates to take Graduate Course Work

Students in their final year of a Bachelor's degree program at the University of Victoria who have a grade point average of at least 6.00 (B+) in the last 15 units of course work attempted may be permitted to register in a maximum of 3 units of graduate courses on the recommendation of the department concerned and with the consent of the Dean of Graduate Studies. Normally, such courses cannot be used for credit if the student subsequently registers in a graduate program.

No application for admission or supporting documentation is required; the graduate advisor of the department in which the courses are to be taken should send a recommendation to the Dean of Graduate Studies, specifying the courses selected. When written permission is received from the Dean, the student should complete an undergraduate course change notice, adding the approved courses to the undergraduate record.

1.9 Auditing Graduate Courses

An individual who is either a graduate student or holds a four year baccalaureate degree as defined in 1.3.1 and is recommended to the Faculty of Graduate Studies by a department, may be permitted to audit up to 3 units of graduate courses in a session. A continuing student should add the audit courses to the registration form; a new applicant taking courses for audit only should submit a completed Auditor Entry Form, as well as proof of degree conferral. Registration as an Auditor is subject to the following conditions:

1.9.1 Admittance to the class is dependent on the class size and other factors that the instructor and the department establish.

1.9.2 The degree of participation in the course is at the discretion of the department.

1.9.3 Attendance and participation shall grant no entitlement to an academic record of such attendance and shall not be considered as meeting admission, prerequisite or course requirements for any graduate program.

1.9.4 The fee, shown in the fee schedule in the Calendar, is payable at the end of the month in which the auditor registers, and is refundable according to Faculty deadlines.

1.10 Upgrading for Admission to Graduate Study

1.10.1 Faculty Admission Requirements Satisfied but Course Background Inappropriate or Prerequisites Lacking

Upon the recommendation of the Department concerned, the Dean may approve the inclusion of the missing background or prerequisites as part of the requirements for the Master's or Doctoral degree.

1.10.2 Faculty Admission Requirements Not Satisfied

Upon the recommendation of the Department concerned, the Dean may approve a pre-entry program consisting of a minimum of six units of undergraduate course work numbered at the 300 or 400 level. This course work must be relevant to the proposed field of study, and must be completed within 12 months of the date of Dean's permission. An average of not less than 6.00 (B+) must be achieved in the six units, and no course must be completed at a level below 4.00 (B-).

This pre-entry option is only available to applicants who have been away from post secondary study for a minimum of one year. Students approved by the Dean for this pre-entry option are guaranteed admission to the Faculty of Graduate Studies upon successful completion of the recommended courses.

2.0 REGISTRATION PROCEDURES AND STATUS

2.1 All students admitted to the Faculty of Graduate Studies must normally register in person, by mail, or by touchtone telephone (check registration material for participating departments) during the dates specified for such registration. All Letters of Admission and Authorizations to Reregister that are not used to register in the term or session to which they apply are automatically cancelled. Students who are issued a Letter of Admission or Authorization to Reregister for September may not use this document for entry in January.

2.2 Reregistration

Students who were registered in the most recent winter session at the University may be authorized automatically for reregistration without the submission of an application and students who have withdrawn and wish to return, or students who are changing their degree program will be required to complete an application. Forms are available through the Graduate Admissions and Records Office.

Students who have registered at another university or college since last in attendance at the University are required to state the names of all educational institutions of postsecondary level attended and to submit two official transcripts of their academic records at these institutions to the Graduate Admissions and Records Office at least eight weeks prior to the session applied for.

2.3 Late Registration

The period for late registration in the Winter Session is the first five days of classes; in Summer Studies, the first two days of classes. Permission of the Dean is required for late registration beyond these dates.

2.4 Due Dates for Dropping Courses

Students may drop first term courses until the last day of classes in October, and second term and full year courses until the last day of classes in February, provided they submit course change notices to the Graduate Admissions and Records office by the appropriate date (see Calendar dates, pp. 3-4). Any failure to do so will result in the student receiving a failing grade (N) for the course. *Students should note that fee refund deadlines for the Faculty differ from the course drop deadlines (see Calendar dates, pp. 3-4).*

2.5 Definition of Full Time and Part Time Status

A full time graduate student during any one of the first term, second term, Summer Studies; or during the entire Winter Session, is one who is either:

(a) enrolled in courses totalling a minimum of 3 units during the fall term, spring term, Summer Studies; or enrolled in a minimum of six units in the Winter Session; or

(b) working on a dissertation (699), thesis (599), project (598), or cooperative education work term (800+) during a term or session.

A part time student is any student who does not fall into category (a) or (b) above.

Students should note the additional restrictions concerning hours of work which are applied to award holders in the Faculty of Graduate Studies. Please consult the regulations governing eligibility for Faculty awards on page 318 of this Calendar.

2.6 Maximum Academic Load

Maximum academic load in the Faculty of Graduate Studies during any one of the first term, second term, or Summer Studies is 9 units of course work or 7½ units of course work plus thesis, dissertation, or project. Maximum academic load for students registered in the entire Winter Session is 18 units of course work or 15 units of course work plus thesis, dissertation, or project. Departments may limit students to fewer units.

A graduate student may not be enrolled in courses such that the sum of the units for each course divided by the number of weeks over which the course extends is greater than one unit per week.

2.7 Continuity of Registration

All students are required to either register in every term from the time of admission until the requirements of the degree have been met, or formally withdraw in accordance with regulation 2.8 below.

2.7.1 Students who do not register or formally withdraw in every session will be considered to have abandoned their program and that program will be terminated. The notation "Withdrawn Without Permission" will be entered on their permanent record. Except in extraordinary situations, Abandoned/Terminated programs will not normally be reactivated.

2.7.2 Students who wish to have their Abandoned/Terminated program reactivated must do so by submitting a letter of appeal to the Graduate Admissions and Records Office. Readmission requires the approval of both the Department/School concerned and the Faculty of Graduate Studies. Readmission does not guarantee that any courses or fee installments from the Abandoned/Terminated program will be allowed to transfer to the new or reactivated program. In all cases the time spent "Withdrawn Without Permission" will be counted against the total allowable time outlined in regulation 5.2.

2.8 Withdrawal from the University

Students in degree programs who wish to withdraw, either temporarily or permanently, must do so formally. Temporary withdrawal is handled by the Graduate Admissions and Records Office. Requests for permanent withdrawal must go to the Office of the Dean of Graduate Studies.

2.8.1 Students may withdraw on a temporary basis by simply using a Registration Form or Academic Change Notice to declare their intentions. This is effective for one session only. Students must register for the next session or withdraw again, if permissible, or they will be "Withdrawn Without Permission" (see regulation 2.7). A student may withdraw temporarily for no more than three (3) terms in a Master's program, and no more than six (6) terms in a Doctoral program. Students cannot be undertaking any academic or research work nor be using any of the University's facilities during the period of temporary withdrawal.

2.8.2 Students who wish to withdraw permanently from the Faculty of Graduate Studies, and have their record indicate that they were in good standing when they withdrew, must apply in writing to the Dean, with a supporting memo from their supervisor. The notation "Withdrawn With Permission" will be placed on their permanent record.

2.8.3 Only the time spent withdrawn with permission of the Dean's Office or the Graduate Admissions and Records Office will not be counted as part of the time limit prescribed for completion of the degree program (see regulation 5.2).

2.8.4 Nondegree and auditing students may cancel their registration at the University by submitting an Academic Change Notice to the Graduate Admissions and Records Office before the specified deadlines for dropping courses.

2.9 Letter of Permission for Studies Elsewhere

Students currently registered in a graduate program who wish to undertake studies at another institution for transfer credit toward their graduate degree at this University must apply in writing to the Dean of Graduate Studies, specifying the host institution, the exact courses and their unit values. The application must be supported by the supervisor. If permission is granted, the student must either temporarily withdraw, or register concurrently in the comprehensive, project, thesis, or dissertation or be registered in a Coop Work Term, at the University of Victoria.

2.10 Western Deans' Agreement

Students currently registered in a graduate program who wish to undertake studies at a western Canadian university for transfer credit toward their graduate degree at the University of Victoria, may be eligible for "exchange" status under the provisions of the Western Deans' Agreement. Students must follow the procedure described under 2.9, specifying that the application is made under the Western Deans' Agreement. If the student is approved as "exchange", the university concerned will be notified by the Dean of Graduate Studies and all tuition fees applicable will be waived by the host institution. Student fees, however, are still applied. All students attending other institutions under the provisions of the Western Deans' Agreement must register concurrently in the comprehensive, project, thesis, or dissertation at the University of Victoria.

2.11 Concurrent LL.B./M.P.A. Program

With concurrent registration in both the Faculty of Law and the Faculty of Graduate Studies, students approved for this program may work towards the LL.B. and M.P.A. degrees simultaneously. Separate degrees will be awarded upon completion of the requirements applicable to the particular degree. Because of the wide variety of academic backgrounds of applicants, degree programs may vary from student to student.

2.11.1 There is no common application form or registration process. All applicants must apply separately to the Faculty of Graduate Studies and the Faculty of Law, and be admitted in accordance with the existing policies of each. Once admitted, students in the combined program must register separately in each Faculty.

2.11.2 Students will register in both degrees concurrently. The academic records of students in the combined program will be maintained separately for each Faculty. Therefore, only those grades for courses which appear on the Faculty of Graduate Studies record will be used for the purposes of making Graduate Studies awards, determining adherence to the Faculty of Graduate Studies academic performance regulations, and assessing fees. Academic performance in the Faculty of Law will be considered by Graduate Studies only in so far as all participants must maintain satisfactory standing in Law (not on probation).

2.11.3 Fees for the Graduate Studies portion of the combined program will be assessed in accordance with existing regulations. Participants in the combined program must pay the total number of fee installments required of a student in the regular M.P.A. program. Fees for the Faculty of Law will be assessed in accordance with the regulations for that Faculty. Students who are uncertain about their fee obligations under the combined program are advised to contact the Faculty of Law and the Graduate Admissions and Records Office. (See FEES FOR GRADUATE STUDENTS for details regarding the reregistration fee).

2.11.4 Only students in an approved combined LL.B./M.P.A. degree program have the permission of the Dean of Graduate Studies to register in concurrent degree programs. If, at any time, a student terminates participation in the combined degree program, permission does not extend to pursuing any other degree concurrently with a graduate degree.

3.0 STUDENT RESPONSIBILITY

3.1 Students are responsible for making themselves familiar with the general Calendar regulations of the Faculty. It is also assumed that they are familiar with the fee obligations as outlined in the fee regulations. If students are unsure about any aspect of the regulations, they are strongly encouraged to contact the Graduate Admissions and Records Office.

3.2 Students are responsible for ensuring that their courses have been chosen in conformity with Calendar regulations. Also, students are responsible for the completeness and accuracy of their registration. They must ensure that there is no discrepancy between the program they are following and that recorded in the Graduate Admissions and Records Office. Included in all registration packages is a document entitled "Authorization to Re-register". This contains a summary of registration in the faculty, degree program, composition of supervisory committee, and graduate fee summary. All changes must be reported promptly to the Graduate Admissions and Records Office.

Students may not take or receive credit for courses for which they are not registered, and may not drop courses after Faculty deadlines without permission of the Dean.

3.3 Students who register in a course for which they have received credit previously or for which they have received equivalent credit on transfer must indicate this by entering DUP (duplicate) on their registration forms. Both courses will be used in the calculation of the sessional and cumulative grade point average, provided that they are not designated as FNC (for no credit in the Faculty of Graduate Studies).

3.4 A letter mailed to a student's address as it currently appears on record in the Graduate Admissions and Records Office will be deemed adequate notification to the student for all matters concerning the student record. Changes in address and telephone number must be reported promptly to the Graduate Admissions and Records Office.

3.5 Medical Requirement

The University, through Health Services, may require a student to take a medical examination at any time during attendance at the University. This measure exists to safeguard the medical welfare of the student body as a whole.

Students who are not residents of Canada are required to produce evidence of adequate sickness and hospital insurance coverage before registration can be considered complete. Such students are not eligible for insurance coverage through the Province of British Columbia, and must obtain coverage through a private company prior to registration. Further information is found under Health Services, page 26.

4.0 ACADEMIC STANDING

4.1 Faculty of Graduate Studies Grading System:

Passing Grades:	Grade Point Value:	
A+	9	
A	8	
A-	7	
B+	6	
B	5	
B-	4	
C+	3	
C	2	
D	1	
*COM	N/A	Complete

Failing grades: (no supplementals offered in the Faculty of Graduate Studies)

F	0	
*N	0	Did not write examination or otherwise complete course requirements by the end of the term of session.

Temporary Grades:

*INC	N/A	Incomplete
*DEF	N/A	Deferred status granted
*INP	N/A	In Progress
*CIC	N/A	Coop Interrupted Course

*COM — used only for 0 unit graduate courses and those graduate courses designated by the Senate. Such courses are identified in the course listings.

*INC — used for those graduate credit courses designated by the Senate and identified in the course listings; also used, with Dean's permission, for those graduate credit courses with regular grading (A to F, including N) which are not complete by the end of the term or session due to exceptional circumstances beyond the control of the instructor or student. INC must be replaced by a final grade not later than two months after the end of that term or session.

*DEF — used only when deferred status has been granted because of illness, an accident or family affliction. (See page 16)

*INP — used only for: seminars offered on the same basis as dissertations or theses and designated by Senate (identified in the course listings); work terms; dissertations; theses; projects; comprehensives. In the case of work terms, a final grade must replace INP within two months of the end of term; for dissertations, theses, designated seminars, projects and comprehensives, a final grade must replace INP by the end of the program. If the student does not reregister within the five year (Master's) or seven year (Ph.D.) limit for the degree, the final grades will be N.

*N — in exceptional circumstances, the Dean may authorize the removal of an N grade and the replacement of it by another grade. In accordance with Senate regulations, an instructor shall advise students at the beginning of the term or session of the circumstances under which they would be assigned a grade of N.

*CIC — used for three unit courses whose completion has been interrupted by a coop work term. A final grade must replace the CIC grade within twenty months after the assignment of CIC.

4.2 Course Challenge

With the exception of the M.P.A. foundation courses, graduate course challenge is not allowed in the Faculty of Graduate Studies.

5.0 ACADEMIC STANDARDS FOR GRADUATE DEGREE PROGRAMS

5.1 Course and Program Requirements

5.1.1 Minimum degree requirements

The minimum requirement for a Master's degree is 15 units of work, and satisfactory completion of the prescribed program.

The minimum requirement for the degree of Doctor of Philosophy is 30 units of work beyond the Master's level or 45 units beyond the Bachelor's level, and satisfactory completion of the prescribed program.

ADMN 500-516 can be taken for credit in the M.P.A. program only. These courses will be designated FNC for all non-M.P.A. students.

5.1.2 Graduate Programs

Within the first session of attendance in a graduate degree program, a supervisor will be nominated and a completed graduate program form will be forwarded to the Faculty of Graduate Studies by the graduate adviser on behalf of each student. Unless otherwise specified, the remainder of the prescribed supervisory committee will be nominated and names forwarded to the Faculty by the graduate adviser, within one session of the first registration in the thesis, project or dissertation.

5.1.3 Course Work and Research

Considerable variation is permitted in the balance between research and the course work required for the Master's degree, although most programs include a thesis based on research.

The Doctoral program requires the planning and completion of independent and original work leading to an advance in knowledge in the student's chosen field or fields of study. In addition, a broad knowledge of the field or fields of study must be demonstrated through the candidacy examination. The major portion of the Doctoral program will be devoted to a research project culminating in a dissertation which satisfies the requirements of the Faculty of Graduate Studies. The material must be of sufficient merit to meet the standards of scholarly publications. Where the research justifies it, the Doctoral degree may be awarded for the dissertation alone.

When research is completed, and before the thesis or dissertation is written, the student should contact the Graduate Admissions and Records Office for a copy of the Thesis/Dissertation Guidelines, which specify academic and technical requirements to ensure acceptability of the paper by the University and the National Library. Every student must then make an appointment with the Special Collections Librarian's office in the McPherson Library to review these guidelines, and to receive advice on technical requirements specific to the individual paper.

5.1.4 Minimum Graduate Component of Master's Degree

A Master's candidate must complete a minimum of 12 units of graduate credit out of the total units required for the degree. Individual departments may require a higher number of units at the graduate level. Courses numbered at the 100 and 200 level may be included in the program as prerequisites but will be indicated on the student record as FNC (for no credit on a graduate program); as well, courses indicated on the record as FNC will not be included in sessional or cumulative grade point average calculations.

ADMN 500-516 can be taken for credit in the M.P.A. program only. This courses will be designated FNC for all non-M.P.A. students.

5.1.5 Language Requirements

Master's or Doctoral programs may require a reading knowledge of one or more languages other than English. Language requirements will be prescribed for individual students by the supervisory committee according to departmental regulations (see departmental entries). Such requirements are considered part of the student's program. When a language requirement is imposed, it must be met prior to taking the oral examination or, in the case of nonthesis Master's programs, before the completion of the comprehensive examination and/or the project oral.

5.1.6 Applicability of Transfer Credit

On the recommendation of the department or school concerned, the Faculty of Graduate Studies may accept courses taken at other institutions or at the University of Victoria for credit on a graduate program. However, at least half of the work must be completed as a degree candidate in the Faculty of Graduate Studies at the University of Victoria.

Courses taken at the University of Victoria in other faculties, or as a nondegree student in the Faculty of Graduate Studies, may be considered for transfer to a graduate degree program (see regulation 1.6.4).

In order to qualify for transfer, courses must meet all of the following conditions:

a) must be a graduate or senior undergraduate level course;
b) must be completed with a grade of at least B (or equivalent); courses graded Pass/Fail or equivalent are not acceptable;
c) must not be used to meet the minimum admission standards of the Faculty of Graduate Studies;
d) must not have been used to obtain any degree, diploma, certificate, or other credential.

The grades from courses allowed for transfer credit will not appear on the Faculty of Graduate Studies transcript, and they will not be used in determining sessional or cumulative grade point averages. Credit granted at another institution on the basis of "life" or "work" experience is not acceptable for transfer credit. For students admitted as Mature Students (see regulations 1.4) transfer credit will not be granted for courses taken before enrolling in the Faculty of Graduate Studies.

5.1.7 Courses for no credit in the Faculty (FNC)

All undergraduate courses at the 100-299 level are automatically designated FNC on the student's record.

Upon the recommendation of the student's supervisor and departmental advisor, the Dean may approve the designation of a senior level undergraduate course (those courses number 300-499) as FNC. Such designation for senior undergraduate courses must be approved at the time of registration. Under no conditions will the Dean approve the application of FNC to a course after the normal course change period has passed. Also, under no conditions will the Dean approve the removal

of the FNC designation after the normal course change period has passed.

ADM 500-516 can be taken for credit in the M.P.A. program only. This courses will be designated FNC for all non-M.P.A. students.

5.2 Time Limits

5.2.1 Normally, a student proceeding toward a Master's degree will be required to complete all the requirements for the degree within five years (sixty consecutive months) from the date of the first registration in the Master's degree. In no case will a degree be awarded in less than twelve consecutive months from the time of that registration. However, it is expected that a full time student should complete a Master's degree within 24 consecutive months from the date of first registration. A student in a full time M.P.A. program is expected to complete the degree within 36 consecutive months from the date of first registration.

5.2.2 Normally, a student proceeding toward a Doctoral degree will be required to complete all the requirements within seven years (eighty-four consecutive months) from the date of first registration in the program. If the student has transferred to the Doctoral program after an initial period in a Master's program, completion is required within seven years of the date of the first registration in the Master's program. A degree will not be awarded in less than twenty-four consecutive months from the time of that registration. However, it is expected that the holder of a Master's degree should complete a full time Doctoral program within 36 months of the date of first registration. The holder of a Bachelor's degree should complete such a program within 48 months of the date of first registration.

5.2.3 Students enrolled in a cooperative education program at the Master's level will have an additional 8 months added on to the normal completion times noted above; at the Doctoral level, 12 months will be added.

5.3 Residence Requirement

5.3.1 There are no fixed residence requirements at the University of Victoria for students proceeding to a Master's degree. However, see 5.1.6 and 5.2 above.

5.3.2 A student proceeding to the Doctoral degree must register at the University of Victoria and pursue studies under the direction of a faculty member as a full time student for at least two Winter Sessions; this requirement should be undertaken upon first registration in the program and must be met within 36 consecutive months after the date of first registration. A student entering the Doctoral program with a Master's degree must meet this residency requirement for the equivalent of one Winter Session, which should be undertaken upon first registration in the program and must be completed within 24 consecutive months after the date of first registration.

5.4 Academic Performance

A student who fails to meet academic standards, or whose dissertation, thesis, or project is not progressing satisfactorily, may be required to withdraw from the Faculty of Graduate Studies with the advice and consent of the department concerned through its graduate adviser, chair, or chair's delegate.

5.4.1 Students in the Faculty must achieve a grade point average of at least 5.00 (B) for every session in which they are registered. Individual departments or schools may set higher standards. All students with a sessional average below 5.00 will not be allowed to register in the next session until their academic performance has been reviewed by their supervisory committee and continuation in the Faculty is approved by the Dean.

Grades on courses designated FNC (see regulation 5.1.7) or on Transfer Credit courses will not be used in the calculation of sessional or cumulative grade averages.

5.4.2 Every grade of C+ or lower in a course taken for credit in the Faculty of Graduate Studies must be reviewed by the supervisory committee of the student and a recommendation made to the Dean of Graduate Studies. Such students will not be allowed to register in the next session until approved to do so by the Dean.

5.4.3 Students registered in a project/thesis/dissertation will have their progress evaluated through an Annual Report filed with the Graduate Admissions and Records Office by their supervisor (in consultation with the supervisory committee and the graduate adviser) which contains recommendations for continuation.

5.4.4 Conditions may be imposed by the Faculty (upon the advice of the supervisory committee) for continuation in the program; these must be met within the next session of attendance, or the student will be required to withdraw.

5.5 Supervisory Committee

5.5.1 Master's With Thesis

With the exception of coursework degrees requiring a project or comprehensive examination, there shall be a supervisory committee for the Master's degree of at least three members including the supervisor, approved by the Faculty of Graduate Studies. It is recommended that one of these should be from outside the department.

5.5.2 Master's Without Thesis

For course work degrees requiring a project or comprehensive examination, there shall be a supervisory committee of at least three members approved by the Faculty of Graduate Studies. The supervisor shall be a faculty member of the Faculty of Graduate Studies, the second member of the committee must be the department graduate adviser or the adviser's designate, and the third member of the committee may be external to the department or University and nominated by the department at the time of the comprehensive examination or project oral.

5.5.3 Doctoral Degree

For the Doctoral degree a student's program shall be under the direction of a supervisory committee of at least four members, approved by the Faculty of Graduate Studies. The chair of the committee shall be the faculty member under whose supervision the student is carrying out the major research component of the program. At least one member of the committee shall be from outside the department in which the major research is being carried out. The committee shall recommend the program to the Faculty of Graduate Studies.

5.5.4 Role of the Supervisor

The supervisory committee shall have a chair who shall ordinarily be designated as the supervisor. The committee shall: recommend to the Faculty of Graduate Studies a program of studies; supervise the project, thesis or dissertation; participate in a final oral examination of the candidate on the research and areas of study. The committee may conduct other examinations, and shall recommend to the Faculty of Graduate Studies whether or not a degree be awarded to a candidate.

5.5.5 Role of the Graduate Adviser

Except as specified elsewhere, the departmental graduate adviser is the official liaison person between the department and the Faculty of Graduate Studies.

The graduate adviser makes recommendations on the following matters to the Faculty of Graduate Studies: graduate admissions, awards administered by the Faculty of Graduate Studies, and any changes to the student record (including supervisory committee, program, and registration). The Annual Report on student progress, and any Requests for Oral must be cosigned by the department graduate adviser, before transmission to the Faculty.

The graduate adviser also serves as the primary contact for students in all matters concerning graduate programs offered by the department.

5.6 Doctoral Candidacy Examination

Within two years of registration as a provisional Doctoral student and at least six months before the final oral examination, a student must pass a candidacy examination in subjects relevant to the general field of the student's research and such other examinations, written or oral, or both, as may be required by the supervisory committee.

5.7 Oral Examinations and Examining Committees

The Dean of Graduate Studies or his nominee will act as Chair at the final oral examination. Any tenured member of the Faculty of Graduate Studies with extensive experience in the Faculty is eligible to serve as the Dean's nominee. Oral examinations are open to the public. Notice of examination will be communicated to all faculty members of the department involved and to each academic department at least 14 days prior to the date of the examination.

5.7.1 Oral Examination Requirement

A final oral examination is required of all students. A student may proceed to the oral examination if all courses taken for credit in the Faculty are completed, the cumulative grade point average on all course work taken for credit in the Faculty is 5.00 or more, and any language requirement has been met. The result of the examination will be entered on the student's academic record and transcript as "Complete" if the candidate is successful. If the candidate is not successful, the entry will be "N", and a degree will not be awarded. In certain course work Master's degrees, the final oral may be replaced by a written comprehensive examination.

Regulations covering the format of thesis and dissertation may be

obtained from the Graduate Admissions and Records Office.

If, at the final oral examination for the Master's or Doctoral degree, two or more members of the examining committee are opposed to passing the student, the student will not be recommended for the degree. A student who fails under this condition will have the right to petition the Dean of Graduate Studies within three months for a reexamination, giving reasons in writing. In those cases where the appeal is granted, the Dean, in consultation with the department, may appoint a new external examiner or examiners.

5.7.2 Examiner from Outside the Department

For the Master's degree, the Faculty of Graduate Studies shall appoint an examiner from outside the department concerned; additional external examiners may also be appointed by the Dean of Graduate Studies.

The Doctoral dissertation shall be assessed by an examining committee which will consist of the supervisory committee and at least one other examiner external to the University, who shall be selected by the Faculty of Graduate Studies in consultation with the department concerned and who is an authority in the chosen field of research.

5.8 Degree Completion and Graduation

5.8.1 The University Senate grants degrees in November (Fall) and May/June (Spring) each year. Each candidate for a degree must complete a formal application for graduation. The deadlines to submit completed applications are July 1 for Fall graduation and December 1 for Spring graduation. The Application for Graduation cards are available through the Graduate Admissions and Records Office. A graduation fee is assessed at the time of application, and is payable by the end of the month in which application is made.

5.8.2 The deadlines for completing all requirements for the degree are the final business day in September for Fall graduation, and the final business day in April for Spring graduation. The exact dates for each convocation are set out in the "Deadlines for Convocation" memo.

5.8.3. Students can be considered for awarding of a degree only when all of the following requirements have been satisfied:

a) For Doctoral and Master's with thesis candidates: submission of two final copies of the thesis or dissertation regulations governing the proper submission are set out in the "Instructions for the Preparation of Master's Theses and Doctoral Dissertations". Only the latest version of these instructions is valid. Students should obtain a copy from the Graduate Admissions and Records Office.

b) Submission of the Letter of Recommendation for degree from the Department/School to the Graduate Admissions and Records Office. This letter states that all academic requirements have been completed. Doctoral dissertations submitted to the Faculty of Graduate Studies must be accompanied by a money order made payable to "University Microfilms International" for $45 (U.S.) This fee covers the cost of publication of an abstract in "Abstract Dissertations".

c) Payment of all outstanding fees. Those who have outstanding accounts will not receive a diploma or be issued any transcripts. Students should especially be aware of the minimum program fee for graduate degrees (see FEES FOR GRADUATE PROGRAMS in the FEES section of the calendar). All students should check their fee status at the Graduate Admissions and Records Office.

6.0 COOPERATIVE EDUCATION OPTION

The Faculty of Graduate Studies participates in Cooperative Education at the University of Victoria which integrates periods of full time employment with the academic program. For information on these programs, please contact the Cooperative Education Coordinator or the graduate adviser in the department concerned.

Students in these programs shall register, for each employment period, in a series of designated courses numbered at the 800 level. Normally a student in such a registered course shall be allowed to carry only 1½ units of coursework or project/thesis/dissertation per term in addition to the work term registration.

Upon successful completion of a graduate program which includes a minimum of 8 months of 800 level courses (Master's) or 12 months of 800 level courses (Ph.D.), a coop notation will be placed on the student's official transcript, and an official "Record of Work Terms" appended.

7.0 INTERDISCIPLINARY PROGRAMS

Interdisciplinary programs can only be offered in a combination of departments that have established graduate degree programs. Applicants who wish to obtain a Master's or Doctoral degree in an interdisciplinary program must submit to the Dean of Graduate Studies a proposal which has been jointly developed by the student and the projected supervisor (whose department would be responsible for the student and program), and which has been approved by the graduate adviser of the "home" department.

The proposal must include the names of the projected supervisor and the proposed supervisory committee, as well as a detailed program outline. It is expected that the members of the supervisory committee who represent the major areas within the interdisciplinary program will act as cosupervisors for the degree. Program composition may be negotiated by the members of the supervisory committee, subject to final approval of the Dean of Graduate Studies; however, unless otherwise specified, interdisciplinary degrees shall conform to the regulations governing academic standards under 5.0 (except 5.5 which specifies the composition of the supervisory committee for regular degree programs).

Applicants for interdisciplinary programs must follow the admission procedures and meet the entrance criteria as described under 1.0 and 1.3 or 1.5; however, the grade point average obtained must be 6.00 (B+) on the last 30 units of coursework attempted.

8.0 GRADUATE PROGRAMS BY SPECIAL ARRANGEMENT

Applicants who wish to obtain a Master's or Doctoral degree in a department in which such a program is not offered may submit a proposal to the Dean of Graduate Studies for a program by "special arrangement". This proposal must be jointly developed by the student and the projected supervisor (whose department would be responsible for the student and program), and be approved by that department's graduate adviser or chair.

The completed proposal must include the names of the projected supervisor and proposed supervisory committee, as well as a detailed program outline. Both the composition of the committee and the program must satisfy Faculty regulations under 5.0 (with the exception of 5.5, which specifies the requirements for the supervisory committee for regular graduate programs), as well as the additional requirements listed below.

Approval for the special arrangement program will normally only be given if:

Master's — the department has a major or honours program in the discipline of the proposed Master's program, and has graduated students from the Bachelor's program for at least three years. The supervisory committee shall include at least one member from a department with a regular graduate program, and who has supervised successful candidates for graduate degrees;

Ph.D. — the department has a Master's program in the disciplinary area of the proposed Doctoral program, and has graduated students from the Master's program for at least three years. At least one of the outside members of the supervisory committee shall be from a department which has an active Doctoral program, and both outside members shall have had successful Ph.D. supervisory experience.

Applicants under this category should note that a quota is applied to the number of special arrangement degrees permitted.

The following graduate course numbers may be used by any department offering a program by special arrangement:

DEPT 580*(1-9)	Directed Studies
+DEPT 597(0)	Comprehensive Examination
+DEPT 598(3)	Report Requirement
+DEPT 599(6-15)	Thesis
DEPT 680*(1-15)	Directed Studies
+DEPT 699(30-45)	Dissertation

*may be taken more than once for credit provided course content differs
+grading: INP, COM, N, F

Applicants for special arrangement programs must follow the admission procedures and meet the entrance criteria as described under 1.0 and 1.3 or 1.5; however, the grade point average obtained must be 6.00 (B+) on the last 30 units of coursework attempted.

It is strongly recommended that the Supervisory Committee meet with the student at least twice a year during the life of the program, in order to monitor progress.

9.0 APPEAL PROCEDURE

Students who wish to protest decisions relating to their academic

studies may do so; please consult the appeal regulations on page 13 of this Calendar. A student who wishes to appeal to the Senate a decision of the Faculty of Graduate Studies, shall lodge a written notice of appeal with the Secretary of Senate, Office of the Registrar, within 10 days of being informed in writing of the Faculty's final decision.

10.0 RESEARCH SERVICES

All matters concerning the administration of research grants and contracts are handled by the office of Research Administration, to which inquiries concerning research policies and procedures should be directed. Students whose research falls within the University definition of research involving human subjects must receive prior approval from the appropriate screening committee for research involving human subjects. Research Administration should be contacted for further details concerning research oriented services offered to graduate students.

11.0 TRANSCRIPT REQUESTS

Official transcripts of record are available through the Graduate Admissions and Records Office; costs are outlined in the fees section of the calendar. Those students wishing verification of completion of degree requirements prior to Senate ratification of the degree, should specify provision of a "supporting letter" in addition to the official transcript.

12.0 WORK PERMITS

Department chairs wishing to hire foreign students for teaching or research duties may apply on their behalf to the Dean of Graduate Studies for a work permit to cover a specific period of academic study at the University. Such students must be registered in a degree program in the Faculty of Graduate Studies.

ANTHROPOLOGY

The Department of Anthropology offers a course of study leading to the degree of Master of Arts. This program usually requires two years to complete, but in exceptional cases, the required time may be shorter.

Admission — In addition to transcripts, letters of recommendation, and application forms required by the Faculty of Graduate Studies, the department requires applicants to submit a recent sample of their work (term paper or Honours thesis), and a brief statement outlining the intended program and field of study. Ordinarily a B+ average (6.00 G.P.A.) for the last two years of university work is a minimum requirement for admission to the program.

The Master of Arts degree in anthropology is a general degree requiring a candidate to have a broad knowledge of the subfields of the discipline. In addition to requirements and procedures specified by the Faculty of Graduate Studies, the following general comments apply.

1. Program of Studies

The Department offers two programs of equal status, leading to the M.A. degree: (a) by course work and thesis; and (b) by course work only.

All entering graduate students follow a common program. Approval to select the thesis option is given after completion of two terms of work and is based on satisfactory progress in developing a thesis proposal. Permission to enter the thesis option is granted only if that thesis proposal, approved by the student's supervisory committee, is on file with the department's Graduate Adviser before the next registration subsequent to the initial two terms. It is assumed that students who do not file a proposal will continue in the nonthesis option.

A. Thesis Option:

This program involves at least 12 units of course work and a 6 unit thesis.

CORE COURSES: A student's program will include the following core courses:

500 Seminar in Anthropological Theory, 3 units
501 Seminar in Social and Cultural Anthropology, 1½ units
540 Seminar in Archaeology and Culture History, 1½ units
550 Seminar in Physical Anthropology, 1½ units
560 (LING 560), Linguistic Anthropology, 1½ units.

Core courses contribute 9 units toward the 18 unit minimum requirement for the thesis option.

THESIS: The thesis, carrying 6 units of credit, must meet the stylistic requirements of the department and must be submitted according to a time schedule set by the department. Normally a thesis will entail specialized research on a topical area chosen in consultation with the student's supervisory committee.

OPTIONAL COURSES: Students may choose the remainder of their program from the departmental listings of graduate courses, and may take a maximum of 6 units of upper level undergraduate courses.

B. Nonthesis Option

This program involves a minimum of 18 units of course work if the student is sufficiently well prepared to complete the program in one calendar year. Most students will require 2 years to complete the program and will be required to take a minimum of 21 units of course work.

CORE COURSES: A student's program will include the following core courses:

500 Seminar in Anthropological Theory, 3 units
501 Seminar in Social and Cultural Anthropology, 1½ units
540 Seminar in Archaeology and Culture History, 1½ units
550 Seminar in Physical Anthropology, 1½ units
560 (LING 560), Linguistic Anthropology, 1½ units

ADDITIONAL COURSES: In addition to the core courses, a student's program should include 3 units selected from a, b, c, or d below:

(a) 510 (1½) Selected Topics in Social and Cultural Anthropology
(b) 530 (1½) Ethnology of a Selected Area
(c) 542 (1½) Archaeology of a Selected Area
(d) 552 (1½) Selected Topics in Physical Anthropology

Plus 6 units of electives. (3 additional units of electives are required if the student completes the program in 2 years.) Students may take a maximum of 6 units of upper level undergraduate courses.

ORAL EXAMINATION: At the end of the program there will be a final oral examination based on three papers prepared as part of the requirements for graduate courses. The three papers will be selected to reflect a variety of interests and approaches.

2. Length of Program

Most students require two years to complete the master's degree program, although it may be possible for a student with a satisfactory background to complete the degree in one year. In addition to the graduate courses, students are required to have passed undergraduate courses equivalent to those comprising the Anthropology Honours Program (excluding 499) as outlined in the Calendar. Students without this equivalent must take the appropriate courses to satisfy the honours requirements before completing their degree.

The programs outlined above indicate minimal requirements. In tailoring the program to individual needs, a student's supervisory committee may specify courses to be taken. To correct deficiencies in the student's undergraduate program, the committee may also increase the number of units required. For example, students who enter without at least an undergraduate major may be advised to spend the first year in upper level undergraduate courses before beginning the core program. Similarly, students who have not had courses in quantitative methods and in anthropological linguistics will be advised to elect Anthropology 316 and 317 and an appropriate course, or courses, in Linguistics.

Prospective students are urged to consult the department for assistance in planning a program of study and for more specific information about course offerings.

Faculty and Current Areas of Interest

William H. Alkire, Ph.D. (Illinois)	Ethnology: cultural ecology, Micronesia and Southeast Asia

Leland H. Donald, Ph.D. (Oregon)	Ethnology: social organization, quantitative methods, West Africa, Northwest Coast
Donald H. Mitchell, Ph.D. (Oregon)	Archaeology: ethnohistory, cultural ecology, heritage resource management, Pacific Northwest
David S. Moyer, Ph.D. (Leiden)	Ethnology: social organization, structural anthropology, secular symbolism, Arctic, Indonesia, the Netherlands
Nicolas Rolland, Ph.D. (Cambridge)	Archaeology: paleolithic, ancient hominid societies, hunter-gatherers, method and theory, Western Eurasia, Mediterranean, Inner Asia
Eric A. Roth, Ph.D. (Toronto)	Physical Anthropology: demography, pastoralists, Africa
Peter H. Stephenson, Ph.D. (Toronto)	Ethnology: medical anthropology, ritual and symbolism, communication theory, applied anthropology, communal societies, Canada, Europe
Margot Wilson-Moore, Ph.D. (Southern Methodist)	Ethnology: applied anthropology, medical anthropology, feminist theory, South Asia

GRADUATE COURSES

Not all the following courses will be offered in a particular year. Students should consult the Department to determine the courses which will be offered this year.

ANTH 500 (3) SEMINAR IN ANTHROPOLOGICAL THEORY

ANTH 501 (1½) SEMINAR IN SOCIAL AND CULTURAL ANTHROPOLOGY

***ANTH 510 (1½) SELECTED TOPICS IN SOCIAL AND CULTURAL ANTHROPOLOGY**

Depending on the student's interests and the availability of an instructor, studies may be selected in one or more of the following:

510A Social Organization
510B Economic Anthropology
510C Political Anthropology
510D Anthropology of Religion
510E Symbolic Anthropology
510F Cultural Ecology
510G Cultural Change
510H Medical Anthropology

*** ANTH 530 (1½) ETHNOLOGY OF SELECTED AREAS**

Depending on the student's interests and the availability of an instructor, studies may be selected in one or more of the following:

530A North America
530B Circum-Polar Region
530C Middle America
530D South America
530E Oceania
530F Northeast Asia
530G Southeast Asia
530H Sub-Saharan Africa
530J Pacific Northwest
530K South Asia

ANTH 540 (1½) SEMINAR IN ARCHAEOLOGY AND CULTURE HISTORY

*** ANTH 542 (1½) ARCHAEOLOGY OF A SELECTED AREA**

ANTH 550 (1½) SEMINAR IN PHYSICAL ANTHROPOLOGY

*** ANTH 552 (1½) SELECTED TOPICS IN PHYSICAL ANTHROPOLOGY**

Depending on the student's interests and the availability of an intructor, studies may be selected in one or more of the following:

552A Applied Topics in Osteological Methods
552B Soft Part Methods in Population Variation
552C Anthropometry and Disease
552D Primatology

ANTH 560 (LING 560)(1½) LINGUISTIC ANTHROPOLOGY

*** ANTH 590 (1½-3) DIRECTED STUDIES**

ANTH 597 (0) ORAL EXAMINATIONS (Grading: INP, COM, N or F)

ANTH 599 (6) THESIS (Grading: INP, COM, N or F)

*Students must consult the Department before enrolling in this course.

BIOCHEMISTRY AND MICROBIOLOGY

The Department of Biochemistry and Microbiology offers courses leading to the degrees of Master of Science and Doctor of Philosophy in Biochemistry or Microbiology.

The general regulations governing the granting of advanced degrees as stated in the Calendar on pages 229-236 are applicable.

1. Examinations, oral or written, are mandatory as aids in the planning of individual academic programs.
2. Applicants should arrange to take the G.R.E. (Graduate Record Examination) and submit the results to the Faculty of Graduate Studies with their applications. Students whose native language is not English should submit, in addition to the G.R.E., results of the T.O.E.F.L. (Test of English as a Foreign Language) with their application.
3. All graduate students are required to participate in Biochemistry 580 (seminar) or Microbiology 580 (seminar) throughout the period of registration.
4. Candidates for graduate degrees are required to complete Biochemistry or Microbiology 599 (M.Sc. Thesis) or 699 (Ph.D. Dissertation). In addition to the seminar and thesis or dissertation requirements, candidates for the M.Sc. degree are required to complete a minimum of 6 units of graduate work, 4½ units of which must be 500 level courses (other than 570 — Directed Studies) approved by the department. Candidates proceeding to a Ph.D. degree from a B.Sc. require a minimum of 12 units of graduate course work, 7½ units of which must be 500 level courses, other than 570, offered by the department. Candidates proceeding to a Ph.D. degree from an M.Sc. require a minimum of 6 additional units of graduate course work, 3 units of which must be 500 level courses, other than 570. In addition, all Ph.D. candidates must successfully complete BIOC or MICR 680.

Applications

Requests for information regarding graduate studies in Biochemistry and Microbiology should be sent to the Chair. Application forms are available from the office of the Faculty of Graduate Studies.

Applicants may be considered for admission at any time. Normally applicants with less than a B+ (6.00 G.P.A.) or equivalent average will not be recommended for admission.

Faculty and Current Areas of Interest

J. Ausio, Ph.D. (Barcelona)	Biophysical and biochemical studies of DNA-protein interactions involved in chromatin assembly and transcription
J. Thomas Buckley, Ph.D. (McGill)	Protein secretion; mechanism of action of a microbial ton, mechanism of lipase action
Edward E. Ishiguro, Ph.D. (Illinois)	Biochemical and genetic studies on bacterial cell wall synthesis and antibiotic-induced autolysis; molecular basis for penicillin tolerance
William W. Kay, Ph.D. (British Columbia)	Genetic regulation and biochemistry of membrane transport systems in bacteria; cell surface virulence factors
Alastair T. Matheson, Ph.D. (Toronto)	Structure of archaebacterial ribosomes; structure and evolution of ribosomal proteins; structure of ribosomal protein genes; RNA-protein interactions.
S. Misra, Ph.D. (McMaster)	Plant molecular biology: studies on developmentally regulated and stress-induced gene activity in conifers. Genetic transformation of crop species
Francis E. Nano, Ph.D. (Illinois)	Molecular analysis of virulence factors of intracellular bacterial pathogens, especially *Chlamydia trachomatis* and *Francisella tularensis.*
Robert W. Olafson, Ph.D. (Alberta)	Structure function relationships in membrane glycoproteins; structural studies on polypeptides and oligosaccharides relevant to the pathogenesis of parasitic diseases, polypeptide vaccines.
Terry W. Pearson, Ph.D. (British Columbia)	Immunochemistry and biochemistry of parasitic diseases; immunology of membrane antigens; immunodiagnosis of disease
Paul J. Romaniuk, Ph.D. (McMaster)	Structure and function of RNA; molecular basis of RNA protein interactions
Trevor J. Trust, Ph.D. (Melbourne)	Molecular basis for bacterial virulence and antigenicity

GRADUATE COURSES

Not all the following courses will be offered in a particular year. Students should consult the Department to determine the courses which will be offered this year.

BIOCHEMISTRY

BIOC 501 (1½) NUCLEIC ACIDS
An advanced study of the structures and functions of RNA and DNA. Topics will include protein synthesis in prokaryotes and eukaryotes and the supramolecular organization of chromatin, ribosomes and viruses. Students will be required to write an advanced research paper as part of the course evaluation. (Credit will not be given for both 501 and 401)

BIOC 503 (1½) LIPIDS AND MEMBRANES
The molecular properties of the various classes of lipids and glycolipids, as well as their biosynthesis and regulation, will be considered. The supramolecular structure, function and assembly of biological membranes will constitute the major content of the course. The course will consist of formal lectures in addition to required reading and brief seminars by the students. Students will be required to write an advanced research paper as part of the course evaluation. (Credit will not be given for both 503 and 403)

BIOC 504 (1½) PROTEINS
Detailed examination of protein structure emphasizing techniques for isolation, characterization, chemical modification and synthesis of proteins and peptides. The course will consist of formal lectures in addition to required readings and brief seminars by the students. Students will be required to write an advanced research paper as part of the course evaluation. (Credit will not be given for both 504 and 404)

BIOC 520 (1½) STRUCTURE OF NUCLEIC ACIDS AND GENE EXPRESSION
An in depth consideration of recent advances in the biology and physicochemical properties of nucleic acids. The regulation of gene expression in prokaryotes and eukaryotes will be discussed.

BIOC 521 (1½) BIOLOGICAL MEMBRANES
An advanced study of the properties and functions of biological membranes. Areas of emphasis will include membrane syntheses and assembly, complex membrane systems involved in bioenergetics, molecular transport, signal transduction, and protein secretion.

BIOC 522 (1½) PROTEIN STRUCTURE AND FUNCTION
An in depth consideration of recent advances in protein structure-function relationships from both a chemical and physical perspective. The course will consist of formal lectures in addition to required readings and written presentations by students on selected topics. (*Prerequisite:* 404, 504 or equivalent courses)

BIOC 523 (FORB 523) (1½) MOLECULAR BIOTECHNOLOGY
This course is designed to provide an introduction to recent advances in molecular biotechnology. The following topics will be addressed: recombinant DNA technology, genetic engineering; vectors for genetic transformation, direct gene transfer via liposomes, electroporations, microinjection of DNA, specific examples of transgenics, protein engineering; targeting, import and export of chimeric proteins in cells and organelles, monoclonal antibodies, antisense RNA, industrial enzyme production. This course will consist of formal lectures with written and oral presentations by the students on selected topics. Seminars will be presented by visiting speakers, and several faculty members will contribute to the course in their area of expertise. (*Prerequisite:* 300) (Credit cannot obtained for both BIOC 405/MICR and FORB 523/BIOC 523)

BIOC 524 (FORB 524) (1½) PLANT MOLECULAR BIOLOGY
The following topics will be addressed: organization and expression of plant and chloroplast genomes. Regulation of plant gene expression by light and physiochemical stress, molecular basis of plant hormone action, tissue and organ specific gene expression, molecular genetic approaches to key processes in plants such as nitrogen fixation, photosynthesis, storage protein synthesis, plant viruses and transposable elements, vectors for genetic engineering of plant tissue. (*Prerequisite:* BIOL 300, 331 A/B, BIOC 401 or 501 or equivalents)

BIOC 570 (1-3) DIRECTED STUDIES IN BIOCHEMISTRY
A wide range of biochemical topics will be available for assignments. Topics will be restricted to an analysis of recent advances. The student's graduate adviser will not normally participate in directed studies taken for more than one unit of credit.

BIOC 580 (0) SEMINAR
Attendance and participation are required. Formal presentation of a major research topic in Biochemistry other than the student's own research will be required. (Grading: IMP, COM, N or F)

BIOC 599 (credit to be determined) M.SC. THESIS: BIOCHEMISTRY (Grading: INP, COM, N or F)

BIOC 680 (0) ADVANCED RESEARCH SEMINAR
Attendance and participation are required. Formal presentation of thesis research in Biochemistry and critical discussion of other research seminars.

BIOC 699 (credit to be determined) PH.D. DISSERTATION: BIOCHEMISTRY (Grading: INP, COM, N or F)

MICROBIOLOGY

MICR 501 (1½) MOLECULAR PHYSIOLOGY
An advanced consideration of the molecular aspects of microbial cell structure and growth. Emphasis will be given to the coordination of microbial catabolism, bioenergetics and biosynthesis and cell assembly. The course will consist of formal lectures with additional literature reading and brief seminars by students. Students will be required to write an advanced research paper as part of the course evaluation. (Credit will not be given for both 501 and 401)

MICR 503 (1½) IMMUNOLOGY
The generation of antibody diversity; immune effector mechanisms and their regulation; immunological principles as applied to research and medicine. The course consists of lectures with oral and written presentations by the students on selected topics. Attendance at seminars given by visiting speakers will be required. Students will be required to write an advanced research paper as part of the course evaluation. (Credit will not be given for both 503 and 405)

MICR 504 (1½) MOLECULAR PATHOGENICITY
A detailed consideration of recent advances in microbial pathogenesis. The course consists of lectures with oral and written presentations by the students on selected topics. Attendance at seminars given by visiting speakers will be required. Students will be required to write an advanced research paper as part of the course evaluation. (Credit will not be given for both 504 and 404)

MICR 520 (3) MICROBIAL GENETICS
A consideration of recent advances in selected areas of microbial genetics.

MICR 521 (1½) HOST-PARASITE INTERACTIONS
This course will focus on the molecular and cellular aspects of host-parasite interaction. Bacterial, viral and eukaryotic parasites will be considered. Both parasite and host factors involved in virulence and pathogenesis will be studied with emphasis on host immune responses and the molecular strategies employed by the parasites to evade them.

MICR 570 (1-3) DIRECTED STUDIES IN MICROBIOLOGY
A wide range of microbiological topics will be available for assignment. Topics will be restricted to an analysis of recent advances. The student's graduate adviser will not normally participate in directed studies taken for more than one unit of credit.

MICR 580 (0) SEMINAR
Attendance and participation are required. Formal presentation of a major research topic in Microbiology other than the student's own research will be required. (Grading: INP, COM, N, or F)

MICR 599 (credit to be determined) M.SC. THESIS: MICROBIOLOGY (Grading: INP, COM, N or F)

MICR 680 (0) ADVANCED RESEARCH SEMINAR
Attendance and participation are required. Formal presentation of thesis research in microbiology and critical discussion of other research seminars.

MICR 699 (credit to be determined) PH.D. DISSERTATION: MICROBIOLOGY (Grading: INP, COM, N or F)

BIOLOGY

The Department of Biology offers programs leading to the degrees of Master of Science and Doctor of Philosophy in the general areas of Ecological and Evolutionary Biology, Physiology and Cellular and Molecular Biology.

Facilities

Facilities available include herbarium, greenhouses, constant environment rooms, equipment for radioisotope analysis, an electron microscope laboratory equipped with scanning, transmission and analytical electron microscopes, and closed circulation seawater systems. Ships are available for oceangraphic work, including the University's 16.4 metre marine science service vessel JOHN STRICKLAND. Marine, terrestrial and limnological environments permit field work throughout the year.

Applications

Initial inquiries regarding graduate studies in Biology should be addressed to the Graduate Adviser, Department of Biology. Application forms may be obtained from the office of the Dean of Graduate Studies.

Consideration of an applicant is dependent on a departmental faculty member first agreeing to become the applicant's Supervisor. If the applicant is admitted, the Supervisor will recommend a list of individuals to act as a Supervisory Committee chaired by the Supervisor.

Applicants to the Department of Biology who completed their undergraduate degree at a non-Canadian University should arrange to take the G.R.E. (Graduate Record Examination) and submit the results to the Graduate Admission and Records Office. Applicants whose native language is not English should, in addition to the G.R.E., write the TOEFL (Test of English as a Foreign Language) and submit the scores to the Faculty of Graduate Studies (see page 229 for Faculty requirements) together with their application forms and G.R.E. results. Even with passing TOEFL scores, students may be required to take English language courses as well as their other course work.

All M.Sc. and Ph.D. candidates admitted to the Department of Biology are expected to have or to make up a background knowledge of basic biology at least equivalent to that of a B.Sc. student graduating from this department.

Emphasis in graduate programs is on independent research. An M.Sc. student can expect to take a minimum of 2 years and a Ph.D. student 3 years if entering with a M.Sc. or 4 years if entering with a B.Sc. Students entering with a B.Sc. and intending to take a Ph.D. program will initially be registered in a M.Sc. program. They may be transferred to a Ph.D. program at the end of their first year, on the recommendation of their Supervisory Committee and the Department of Biology and approval by the Dean of Graduate Studies. The M.Sc. program normally requires a minimum of 16 units, with not less than 6 units of graduate courses and BIOL 560. The thesis must be at least 9 units. The Ph.D. program usually requires a minimum of 31 units beyond the M.Sc. or 46 units beyond the B.Sc. At least 6 units of graduate course work and BIOL 560 are normally required. The dissertation must be a minimum of 18 units. Students who completed their M.Sc. in the department of Biology who subsequently enter a Ph.D. program are required to complete only 3 units of graduate course work and BIOL 560. Normally, work as a research assistant or teaching assistant is an integral part of graduate programs.

Applications from students with a first class academic record will be considered for recommendation at any time. Applications from students who have less than a first class average will not normally be considered until the end of February, when all such applications will be considered and evaluated together. Applicants with less than a B+ average or its equivalent in their last two years of work will not normally be recommended for admission by the Department of Biology.

Faculty and Areas of Research

Geraldine A. Allen, Ph.D. (Oregon State)	Systematics, evolution and population biology of flowering plants
Michael J. Ashwood-Smith, Ph.D. (London)	Ultra violet photobiology and mechanisms of mutation induction; low temperature biology
Alan P. Austin, Ph.D. (Wales)	Marine and freshwater phycology and ecology; environmental impact assessment; aquaculture

Marcus A.M. Bell, Ph.D. (British Columbia)	Vegetation and landscape ecology
Ralph O.Brinkhurst, D.Sc. (London)	Marine benthic zoology; ecology of freshwater and marine Oligochaeta
Robert D. Burke, Ph.D. (Alberta)	Developmental biology, Morphogenesis; extracellular matrix
Derek V. Ellis, Ph.D. (McGill)	Marine ecology; sediment benthos; environmental impact assessment
Patrick T. Gregory, Ph.D. (Manitoba)	Ecology of reptiles and amphibians
Barbara J. Hawkins, Ph.D. (Canterbury)	Conifer seedling physiology; mineral nutrition, cold tolerance
Craig W. Hawryshyn, Ph.D. (Waterloo)	Vertebrate neurobiology and behaviour especially of fishes; sensory biology of migration in Pacific Salmonids; visual processing; evolution of colour vision in fishes
Louis A. Hobson, Ph.D. (Washington)	Biological oceanography; phytoplankton ecology and physiology
Nigel J. Livingston, Ph.D. (British Columbia)	Plant biophysics, environmental physiology, conifer water relations
George O. Mackie, D.Phil. (Oxford)	Neurobiology of invertebrates especially coelenterates and tunicates
John E. McInerney, Ph.D. (British Columbia)	Behaviour and physiology of fishes
John N. Owens, Ph.D. (Oregon State)	Plant anatomy; morphogenesis and reproduction of conifers
Robert G.B. Reid, Ph.D. (Glasgow)	Molluscan feeding, digestion, symbiosis; detofication of metals in bivalves; evolutionary theory
Richard A. Ring, Ph.D. (Glasgow)	Physiology and ecology of insects; cold tolerance of Arctic insects
Nancy M. Sherwood, Ph.D. (Berkeley)	Neurobiology of fish reproduction and growth
Verena J. Tunnicliffe, Ph.D. (Yale)	Marine benthic ecology and community structure; evolution
Patrick von Aderkas, Ph.D. (Manchester)	Conifer tissue culture and embryogenesis

GRADUATE COURSES

BIOLOGY

Students should consult the Department concerning which courses will be offered in any year. All students are to register for 560 (seminar). Ph.D. candidates are required to present a departmental seminar in the final year of their program.

Admission to any graduate course requires permission of the instructor.

Courses listed by the title only are offered irregularly as lectures or seminars in a specialized area. Students should consult with their supervisor or the Graduate Adviser on the availability of such courses. For some of these courses, students may be asked to complete the requirements for a senior undergraduate course as well as additional assignments.

BIOL 500 (1½) SELECTED TOPICS IN THE HISTORY AND PHILOSOPHY OF BIOLOGY
R.G.B. Reid F

BIOL 509A (1) NEUROBIOLOGY SEMINAR
One hour/week seminar on topics in current research in neurobiology.
G.O. Mackie, D. Paul, N. Sherwood Y

BIOL 509B (1½) NEUROBIOLOGY LECTURE
Cellular and developmental aspects of the nervous system; connectional specificity in development and regeneration; essentials of neurophysiology including membrane and synoptic potentials, sensory transduction, and general principles of sensory and motor integration in the central nervous system.
G.O. Mackie F

BIOL 509C (1½) NEUROBIOLOGY LABORATORY
Neuronal basis of behavior analysed at the cellular and circuit levels. Laboratory experiments on selected sensory, central integration, and neuromuscular systems using a variety of anatomical and physiological techniques. Results are discussed in class in terms of current ideas about how nervous systems (invertebrate and vertebrate) operate and written up individually in the format of manuscripts to be submitted to a scientific journal.

BIOL 510 (3) ADVANCED TOPICS IN ICHTHYOLOGY

BIOL 511 (1) MARINE SCIENCE SEMINAR
Selected topics in marine biology will be dealt with in depth. (May be repeated more than once) (Offered in the spring term of even numbered years)
L.A. Hobson S

BIOL 512 (1½) ADVANCED BENTHOS ECOLOGY

BIOL 513 (1-3) TOPICS IN DEVELOPMENTAL BIOLOGY

BIOL 514 (1½) ADVANCED ZOOPLANKTON ECOLOGY

BIOL 515 (1½) ECOLOGY SEMINAR

BIOL 518 (1½) ELECTRON MICROSCOPY
An introduction to the principles and basic techniques of electron microscopy emphasizing common preparative methods for transmission and scanning electron microscopy. A final report illustrated by the student's electron photomicrographs is required. (*Prerequisite:* 344 or 417 or equivalent, and permission of the Electron Microscopy Supervisor. Enrollment is restricted to 3 students per term.)
A.R. Fontaine

BIOL 519 (1½) ADVANCED ELECTRON MICROSCOPY
Individual studies in advanced methods.(*Prerequisite:* 518 or equivalent, and permission of the Electron Microscope Supervisor)
(Grading: INC, COM)

BIOL 521 (1½) ADVANCED TOPICS IN MARINE AND/OR FRESHWATER ALGAE

BIOL 526 (1½) TOPICS IN BIOLOGICAL ULTRASTRUCTURE

BIOL 527 (1-3) ADVANCED TOPICS IN CELL BIOLOGY

BIOL 530 (1½) PRINCIPLES OF TAXONOMY

BIOL 532 (1½) TOPICS IN ENDOCRINOLOGY

BIOL 534 (1½) PROBLEMS IN ENVIRONMENTAL MANAGEMENT

BIOL 545 (1½) ASPECTS OF ENVIRONMENTAL SCIENCE

BIOL 549 (1-6) INDIVIDUAL STUDY
(May be taken in any of the following areas under the appropriate faculty member)

549A Evolution
549B Ecology
549C Physiology
549D Cell Biology
549E Molecular Biology
549F Marine Biology

BIOL 550 (1-6) DIRECTED STUDIES

BIOL 555 (1½) ADVANCED EVOLUTIONARY BIOLOGY

BIOL 560 (1) GRADUATE SEMINAR
Required of all graduate students every year of their degree program except by Departmental permission. Shall be treated, in its grading, as the thesis or the dissertation and shall be given one unit of credit upon completion. (Grading: INP, COM, N or F)

BIOL 599 (credit to be determined) THESIS
(Grading: INP, COM, N or F)

BIOL 699 (credit to be determined) PH.D. DISSERTATION
(Grading: INP, COM, N or F)

FOREST BIOLOGY

FORB 500 (1½) FOREST BIOLOGY
Required of all Forest Biology graduate students. An overview of the philosophy and goals of forest biology from the perspectives of: past, present and future needs; industry, government and university roles; and, basic and applied research and development. (2-0)

FORB 520 (1½) FOREST GENETICS AND TREE IMPROVEMENT
Lecture and discussion of current literature and advanced topics in forest genetics and tree improvement. Emphasis on the application of basic genetic principles to forest tree breeding and tree improvement. Topics may include: population genetics, selection and breeding, seed production and seed orchards, progeny testing, vegetative propagation, species hybridization, molecular genetics, and gene conservation. (*Prerequisite:* BIOL 300)

FORB 523 (BIOC 523) (1½) MOLECULAR BIOTECHNOLOGY
This course is designed to provide an introduction to recent advances in molecular biotechnology. The following topics will be addressed: recombinant DNA technology, genetic engineering; vectors for genetic transformation, direct gene transfer via liposomes, electroporations, microinjection of DNA, specific examples of transgenics, protein engineering; targeting, import and export of chimeric proteins in cells and organelles, monoclonal antibodies, antisense RNA, industrial enzyme production. This course will consist of formal lectures with written and oral presentations by the students on selected topics. Seminars will be presented by visiting speakers, and several faculty members will contribute to the course in their area of expertise. (*Prerequisites:* BIOL 300, BIOL 331A/B, BIOC 300) (Credit cannot be obtained for both BIOC 405 and FORB 523/BIOC 523)
S. Misra

FORB 524 (BIOC 524) (1½) PLANT MOLECULAR BIOLOGY
The following topics will be addressed: organization and expression of plant and chloroplast genomes. Regulation of plant gene expression by light and physiochemical stress, molecular basis of plant hormone action, tissue and organ specific gene expression, molecular genetic approaches to key processes in plants such as nitrogen fixation, photosynthesis, storage protein synthesis, plant viruses and transposable elements, vectors for genetic engineering of plant tissue. (*Prerequisites:* BIOL 300, BIOC 401 or 501 or equivalent, BIOL 331 A/B)
S. Misra

FORB 531 (1½) TREE GROWTH AND DEVELOPMENT
Tree growth and development from the seedling to maturity will be discussed. Shoot, bud, root and wood formation will be emphasized. Laboratories will include seedling development, forms of shoot development, and control of shoot growth, forms of vegetative bud development, root development in relation to symbionts and cambial structure and function in wood formation. (2-3)

FORB 532 (1½) REPRODUCTIVE BIOLOGY OF FOREST TREES
The physiology and development of reproductive structures will be covered from the stages of floral initiation to seed maturity. Floral induction, pollination and factors affecting seed, cone and flower development will be discussed. Laboratories will include floral induction, floral development, pollination biology, pollen physiology, embryology, and seed, cone and fruit development.
J.N. Owens S(2-3)

FORB 546 (1½) CLONAL PROPAGATION OF FOREST TREES
Present and future techniques for clonal propagation of forest trees will be considered as well as the potential and limitations of clonal propagation for reforestation. Techniques for rooting of cuttings, grafting, bud and embryo culture and somatic embryogenesis will be taught. Development of techniques for embryoid culture from single cells and root and shoot development from callus will be discussed. Laboratories will emphasize clonal propagation techniques using conifer and selected hardwood species. (*Prerequisite:* 545 or permission of the instructor) F(2-3)

FORB 551 (1½) TREE PHYSIOLOGY
Basic principles of mineral nutrition, water relations, photosynthesis, respiration, transport and growth regulators as they apply to forest trees and the environmental influence on forest tree metabolism, growth, development and reproduction.
B.J. Hawkins F(2-3)

FORB 552 (1½) SEEDLING PHYSIOLOGY AND REGENERATION
This course will concern the production of seedlings for reforestation. Nursery practices influencing growth, dormancy induction and cold hardiness; and measures of seedling performance and quality will be discussed. The performance of natural regeneration, and environmental influences on regeneration will be considered.
B.J. Hawkins F(2-3)

FORB 553 (1½) ENVIRONMENTAL PHYSIOLOGY OF PLANTS
Interactions between plants, soil and the atmosphere and how these interactions determine plant survival, growth and development. Topics will include heat and mass transfer, plant-water relations, photosynthesis and respiration, plant growth regulators and environmental control of morphogenesis. (*Prerequisite:* 331A)

FORB 555 (1½) ADVANCED FOREST PATHOLOGY
Lectures and laboratory sessions designed to familiarize graduate students with the most recent advancements in forest pathology. Topics may include: a review of past and present scientific literature, status of the world's most important forest diseases and techniques such as recent advancements in biotechnology that are being used to solve forest pathology problems. (*Prerequisite:* A course in Mycology or Plant Pathology) F(2-3)

FORB 556 (1½) TECHNIQUES IN FOREST PATHOLOGY
A series of lectures and laboratory and field exercises to acquaint graduate students with specific techniques that are being used by both researchers and silviculturalists for solving disease problems. (*Prerequisite:* 555 or permission of the instructor) S(2-3)

FORB 557 (1½) ENVIRONMENTAL MEASUREMENTS
Techniques and instruments to measure soil and plant water status and the physical micro-environment in the field, growth chamber, and greenhouse. Topics will include measurement fundamentals, physical fundamentals, temperature, radiation, humidity and water content, wind speed, heat and mass transfer, data loggers, interpretation and analysis of data.
N.J. Livingston F

FORB 560 (1½) FOREST BIOLOGY SEMINAR
Student and guest seminars on selected topics in forest biology and forest biotechnology and regeneration. Required of all graduate students in forest biology every year of their degree program (except by Departmental permission)
B.J. Hawkins, N.J. Livingston FS

FORB 570 (1½) ADVANCED TOPICS IN FOREST BIOLOGY

MARINE SCIENCE

MRNE 500 (1-6) DIRECTED STUDIES

MRNE 501 (3) SPECIAL TOPICS

MRNE 502 (1½) SPECIAL TOPICS

BUSINESS

MASTER OF BUSINESS ADMINISTRATION PROGRAM

Beginning in September 1992, the School of Business proposes to offer both full time and part time programs of study leading to the degree of Master of Business Administration (M.B.A.). The M.B.A. program is intended for prospective business professionals and practising managers who wish to acquire or update skills required for effective business management. The program will provide students with both a broad knowledge of the functional areas of business and the opportunity for some optional specialization in one of the following areas: entrepreneurship and small business, tourism management, international business. A cooperative education component will be included for full time students (see below).

Admission

Candidates will be expected to have a four year baccalaureate degree from a recognized university, or equivalent qualifications, with an academic standing acceptable to the School and the Faculty of Graduate Studies (see Admission to Master's Degrees, section 1.3, of the Graduate Calendar). In exceptional cases the School, with the agreement of the Dean of the Faculty of Graduate Studies, may waive this requirement on the presentation of other evidence, such as substantial professional experience, which indicates that the candidate will complete the program successfully (see Admission to the Master's degree as a Conditionally Admitted Mature Student, section 1.4). Applicants are advised that enrollment in the program will be limited.

Cooperative Education

The Cooperative Education component of the M.B.A. program will provide the opportunity to obtain relevant work experience while completing degree requirements. Students will be required to complete a minimum of two work terms, each of four months duration. The first work term will normally begin at the end of a student's first eight months of study. The Cooperative Education component will normally be mandatory for full time students, although students with prior relevant work experience may apply for exemption. Cooperative Education will not be available for part time students.

Academic Advice

Students completing an undergraduate degree in preparation for entry to the M.B.A. program or otherwise taking upper level undergraduate courses to strengthen their applications, are encouraged to consult the School for advice concerning an appropriate program of study. Other prospective applicants requiring advice on the academic program should also consult the School.

Faculty and Major Areas of Research

David A. Boag, Ph.D. (Toronto)	Marketing, entrepreneurship
M. Dale Beckman, Ph.D. (Michigan)	International marketing
Ali Dastmalchian, Ph.D. (Wales)	Organizational design, management of innovation
Peter E. Murphy, Ph. D. (Ohio)	Tourism planning, marketing

CHEMISTRY

The Department offers programs of study leading to the degrees of Master of Science and Doctor of Philosophy. Research areas include the following: Organometallic chemistry; transition metal chemistry; inorganic photochemistry; bio-inorganic chemistry; multinuclear NMR studies; crystallography; kinetics and mechanisms; mass spectrometry; ion transport phenomena; electrochemistry; surface science; spectrometry of expanding jets and molecular beams; photophysics; electronic spectroscopy; environmental chemistry; organic chemistry; organic photochemistry; physical organic chemistry; synthetic organic chemistry; natural products.

The Department is exceptionally well equipped. Major items of instrumentation serving both teaching and research needs include: two X-ray diffractometers, a CAMAC automated Picker, a Nonius CAD-4 and a VAX station 3100; five NMR instruments including Bruker 360MHz and 250MHz systems equipped for multinuclear and variable temperature work; a Kratos Concept IH mass spectrometer system with EI/CI/FAB sources, GC/MS interface with autosampler and a Finnigan GC-Mass spectrometer with CI/EI sources, data acquisition system and negative ion capability; a Bruker E200tt ESR spectrometer with ENDOR facilities and computer, as well as a Varian E6S; electrochemical systems from PAR and Metrohm; a Baird-Atomic 1.5m stigmatic grating spectrograph and a Jarrell-Ash 3.4m Ebert grating spectrograph; a J-Y laser Raman spectrometer; a Perkin-Elmer MPF66 spectrofluorometer; a Perkin-Elmer DSC7 Differential Scanning Calorimeter, a Perkin-Elmer 141 polarimeter, a full range of UV/Vis, IR, FTIR spectrophotometers; liquid (analytical and preparative) and gas chromatographs; high pressure hydrogenation apparatus.

Students admitted to M.Sc. (or Ph.D.) programs in Chemistry who do not have the equivalent of an Honours degree will be required to make up any deficiencies by enrolling for credit in sufficient of the fourth year undergraduate courses CHEM 411, 424, 425, 433, 434, 444 and 446 to give them three units of credit
in their major area of specialty, and at least 1½ units of credit in each of two other areas. Such makeup course requirements are additional to those required for the graduate degree.

Because of the varied backgrounds of students entering graduate school, the Department requires all entering graduate students to take a set of orientation examinations soon after their arrival. Students showing deficiencies in their knowledge of fundamental chemistry will be required to make good the deficit by approved reading or by taking and passing the appropriate undergraduate courses. Failure to achieve a minimum of B- in an undergraduate chemistry course will normally result in the student being asked to withdraw.

Students for graduate degrees are required to complete Chemistry 599 (M.Sc. Thesis) or 699 (Ph.D. Dissertation). They are also required to take 509 (Seminar) throughout their period of registration.

i) Candidates for M.Sc. degrees will normally be required to complete 3 units of graduate lecture courses and 6 units of discussion courses chosen from 522 (A-D), 630 (A-D), or 644 (A-D).

ii) Candidates for Ph.D. degrees will normally be required to complete 6 units of graduate lecture courses and 9 units of discussion courses chosen from 522 (A-D), 630 (A-D), or 644 (A-D).

Appropriate courses from this or other departments may be substituted with the permission of the Chair.

Faculty and Major Fields of Research

Walter J. Balfour, Ph.D. (McMaster), D.Sc. (Aberdeen)	Electronic spectroscopy
David Berg, Ph.D. (Berkeley)	Synthetic organolanthanide chemistry

Graham R. Branton, Ph.D. (Southampton)	Photoelectron spectroscopy and electron impact phenomena; mass spectrometry and environmental chemistry
Gordon W. Bushnell, Ph.D. (West Indies)	Crystallography, bio-inorganic chemistry; proteins; nucleic acids; coordination compounds
Thomas W. Dingle, Ph.D. (Alberta)	Theoretical chemistry
Keith R. Dixon, Ph.D. (Strathclyde)	Transition metal and organometallic chemistry, metal clusters; multi-nuclear magnetic resonance
Alfred Fischer, Ph.D. (New Zealand)	Physical organic chemistry
Thomas M. Fyles, Ph.D. (York)	Synthetic organic chemistry; ion transport phenomena
Terence E. Gough, Ph.D. (Leicester)	Infrared and visible laser spectrometry of expanding jets and molecular beams; photodynamics of van-der-Waals molecules and clusters
David A. Harrington, Ph.D. (Auckland)	Electrochemistry and surface science
Martin B. Hocking, Ph.D. (Southampton)	Synthetic organic; pulping and bleaching chemistry; environmental emission control
Alexander D. Kirk, Ph.D. (Edinburgh)	Inorganic photochemistry, photophysics, spectroscopy and energy transfer processes
Alexander McAuley, Ph.D., D.Sc. (Glasgow)	Inorganic kinetics and mechanisms — solvolysis and redox reactions; bioinorganic chemistry; heavy metal toxicity
Reginald H. Mitchell, Ph.D. (Cambridge)	Synthesis of novel aromatic hydrocarbons; their environmental effects and their metal complexes as potentially interesting conductors
Gerald A. Poulton, Ph.D. (Saskatchewan)	Natural products; synthetic organic chemistry
Frank P. Robinson, Ph.D. (Alberta)	Organic synthesis; physical organic chemistry
Claude Spino, Ph.D. (UBC)	Synthesis of natural products; synthetic methodology
Stephen R. Stobart, Ph.D. (Nottingham)	Electronic structure and reactivity of binuclear transition metal complexes; organometallic chemistry and catalysis
Peter C. Wan, Ph.D. (Toronto)	Organic photochemistry; reactive intermediates; physical organic chemistry
Paul R. West, Ph.D. (McMaster)	Electron spin resonance; organic free radical reaction mechanisms; environmental chemistry

GRADUATE COURSES

Students should consult the Department to determine the graduate courses offered in any particular year.

CHEM 509 (1) SEMINAR (Grading: INP, COM, N or F)

CHEM 510 (1½) INSTRUMENTAL TECHNIQUES

CHEM 522 (1½ or 3) CURRENT TOPICS IN INORGANIC CHEMISTRY
(Offered as 522A, 522B, 522C, 522D)

CHEM 523 (1½ or 3) ORGANOMETALLIC CHEMISTRY

CHEM 525 (1½ or 3) THEORETICAL INORGANIC CHEMISTRY

CHEM 526 (1½ or 3) TOPICS IN ADVANCED INORGANIC CHEMISTRY

CHEM 533 (1½ or 3) ORGANIC SYNTHESIS

CHEM 545 (1½ or 3) REACTION KINETICS AND REACTION RATE THEORY

CHEM 546 (1½ or 3) SPECTROSCOPY AND THE CHEMISTRY OF EXCITED STATES

CHEM 550 (1½ or 3) CHEMICAL APPLICATIONS OF GROUP THEORY

CHEM 554 (1½ or 3) APPLIED QUANTUM MECHANICS

CHEM 555 (1½ or 3) STATISTICAL MECHANICS

CHEM 556 (1½ or 3) TOPICS IN ADVANCED PHYSICAL CHEMISTRY

CHEM 565 (1½ or 3) THEORY AND APPLICATION OF NUCLEAR MAGNETIC RESONANCE SPECTROSCOPY

CHEM 566 (1½ or 3) CRYSTALLOGRAPHY AND CHEMISTRY OF THE SOLID STATE

CHEM 590 (1-3) DIRECTED STUDIES

CHEM 599 (10) M.Sc. THESIS (Grading: INP, COM, N or F)

CHEM 630 (1½ or 3) CURRENT TOPICS IN ORGANIC CHEMISTRY
(Offered as 630A, 630B, 630C, 630D)

CHEM 633 (1½ or 3) TOPICS IN ADVANCED ORGANIC CHEMISTRY

CHEM 634 (1½ or 3) ADVANCED PHYSICAL ORGANIC CHEMISTRY

CHEM 636 (1½ or 3) CHEMISTRY OF HETEROCYCLIC COMPOUNDS

CHEM 638 (1½ or 3) CHEMISTRY OF NATURAL PRODUCTS

CHEM 644 (1½ or 3) CURRENT TOPICS IN PHYSICAL CHEMISTRY
(Offered as 644A, 644B, 644C, 644D)

CHEM 645 (1½ or 3) ADVANCED ELECTROCHEMISTRY

CHEM 699 (30) PH.D. DISSERTATION (Grading: INP, COM, N or F)

CLASSICS

The Department of Classics offers a two year program of studies leading to the degree of Master of Arts in Classics. Course work will include both Greek and Latin language and literature, but the thesis may be written in the areas of Greek Literature, Latin Literature, Ancient History, or Classical Archaeology.

A minimum of 15 units of work from Classics Department offerings

is required for the M.A. degree. In the first year of study the candidate will take a full load of course work, consisting of current offerings at the 500 level and a supplement of recommended upper level undergraduate courses. In the second year of study the candidate will write a thesis of 6 unit value and complete course work requirements at the 500 level. In exceptional circumstances a candidate may be allowed to write a thesis of 9 unit value. Candidates should note that University regulations require that at least 12 units of work at the 500 level are required for the M.A. degree, and that at least 10 units of work a year should be offered by full time students. There will be a final oral examination on the thesis. Proficiency in reading either French or German or Italian must be demonstrated. For further information please consult the Graduate Adviser of the Department and read the Department's entry in the undergraduate section of this Calendar.

Faculty and Fields of Research

Keith R. Bradley, B. Litt. (Oxford)	Roman history, especially Late Republic and Early Empire; Roman social relations; Roman historians and historiography
John G. Fitch, Ph.D. (Cornell)	Greek and Roman drama, especially Seneca; Didactic poetry
John P. Oleson, Ph.D. (Harvard)	Ancient technology, maritime archaeology, Etruscan and Roman architecture
Samuel E. Scully Ph.D. (Toronto)	Greek epic and tragedy
Gordon S. Shrimpton, Ph.D. (Stanford)	5th and 4th century Greek history and historiography
Peter L. Smith, Ph.D. (Yale)	Roman comedy; Augustan Latin poetry

GRADUATE COURSES

Three of the following courses will be offered each academic year, and offerings will rotate according to availability of faculty and student needs. Students shall make their choices in consultation with the Graduate Adviser.

CLAS 511 (2) EARLY GREEK LITERATURE
CLAS 512 (2) GREEK DRAMA
CLAS 513 (2) CLASSICAL GREEK PROSE
CLAS 521 (2) ROMAN COMEDY AND SATIRE
CLAS 522 (2) ROMAN PROSE OF THE LATE REPUBLIC
CLAS 523 (2) LATE REPUBLICAN AND AUGUSTAN POETRY
CLAS 524 (2) POST-AUGUSTAN POETRY
CLAS 525 (2) POST-AUGUSTAN PROSE
CLAS 541 (2) GREEK HISTORY
CLAS 542 (2) ROMAN HISTORY
CLAS 543 (2) CLASSICAL ARCHAEOLOGY
CLAS 590 (2) DIRECTED INDIVIDUAL STUDY
CLAS 599 (6-9) M.A. THESIS (Grading: INP, COM, N or F)

The unit value of the thesis shall be 6. In exceptional cases more than 6 units may be awarded. Before beginning the thesis the candidate must arrange with the supervisory committee and the Graduate Adviser the number of units to be assigned.

COMPUTER SCIENCE

Program

The Department of Computer Science offers a graduate program leading to the degree of Master of Arts (M.A.) or Master of Science (M.Sc.) in Computer Science and to the degree of Doctor of Philosophy (Ph.D.) in Computer Science. The Department also participates in the Cooperative Education program. Faculty members in the Department are pursuing research in areas that include Software Engineering, Software Systems, Theory of Computing, Programming Languages, Distributed Computing, Logic Programming, VLSI Design and Test, and Numerical Analysis.

The program of study for each student is determined by the student's supervisory committee in consultation with the student. The Master's Program consists of a minimum of 15 units which includes course work, a seminar course (C SC 595) and a Master's thesis (C SC 599). In certain circumstances, students may register for a Master's project (C SC 598) instead of a thesis. At least 12 units of the Program must be at the 500 level or higher. The remaining units must be at the 400 level or higher. The Master's thesis must be defended in an oral examination. A student who chooses the project option will also have an oral examination. This examination will cover the project as well as material from three courses chosen by the student's supervisory committee in consultation with the student.

Individuals interested in the Cooperative Master's degree should contact the Graduate Adviser of the Computer Science Department for details about that program.

Applicants for a Master's Program in the Department should have a major or honours degree in Computer Science (or its equivalent) or a major or honours degree in Mathematics with an emphasis on Computer Science. A student who does not have such a degree can be admitted to the program, but may be required to complete additional makeup courses. In doing so, the student must obtain a grade of at least B (5.00) in each such makeup course, and an average B+ (6.00) overall in the makeup courses. Mature students are advised to consult the Faculty regulations regarding conditional admittance.

A student must normally have completed a Master's Degree in Computer Science, or the equivalent, before entering the Ph.D. Program. For students entering with a Master's Degree, the Ph.D. program consists of a minimum of eight units of course work and a dissertation (C SC 699). For students transferred to the Ph.D. Program with a Bachelor's Degree, a minimum of 16 units of course work and a dissertation are required. A Ph.D. program must include the seminar course (C SC 595) unless the student has already taken an equivalent seminar course. Each student must pass the comprehensive examinations and the Ph.D. candidacy examination. The Ph.D. Dissertation must be defended in an oral examination.

Facilities

The Department offers its graduate students a wide range of equipment for study and research. This equipment includes several multi-user machines supporting UNIX, as well as Sun workstations (monochrome and colour), an IBM 3090 mainframe and laser printers. There are also numerous microcomputers of various kinds available for specific research projects. The Sun workstations and other UNIX computers are connected with Ethernet, and can also be accessed from remote terminals.

Applications

Initial inquiries regarding graduate studies in Computer Science should be addressed to the Graduate Admissions Committee, Department of Computer Science. Application forms may be obtained from the Graduate Admissions and Records Office.

Faculty and Fields of Research

Mantis H.M. Cheng, Ph.D. (Waterloo)	Logic programming, operating systems, real-time programming, compiler construction
John A. Ellis, Ph.D. (Northwestern)	Theoretical computer science, computational complexity, algorithms
Michael R. Fellows, Ph.D. (Calif.-San Diego)	Computational complexity theory, combinatorial algorithms
Daniel M. Hoffman, Ph.D. (N. Carolina, Chapel Hill)	Software engineering
R. Nigel Horspool, Ph.D. (Toronto)	Compiler construction, programming languages, operating systems

Michael R. Levy, Ph.D. (Waterloo)	Abstract data types, programming languages, software specifications, software engineering
D. Michael Miller, Ph.D. (Manitoba)	Fault diagnosis, design for testability, computer aided design for VLSI systems, multiple valued logic
Hans A. Muller, Ph.D. (Rice)	Software Engineering; programming in the large; programming environments; programming languages.
Jon C. Muzio, Ph.D. (Nottingham)	Fault detection, fault tolerant computing, multiple valued systems
Wendy Myrvold, Ph.D. (Waterloo)	Graph theory, graph algorithms, network reliability, graph reconstruction
D. Dale Olesky, Ph.D. (Toronto)	Numerical linear algebra, matrix theory
Frank Ruskey, Ph.D. (Calif., San Diego)	Combinatorial algorithms
Micaela Serra, Ph.D. (Victoria)	VLSI design, fault tolerant computing, multiple valued systems
Gholamali C. Shoja, D.Phil. (Sussex)	Distributed and real time operating systems, computer communications, architectural and runtime support for expert systems
Maarten van Emden, Ph.D. (Amsterdam)	Logic programming
William W. Wadge, Ph.D. (Calif.-Berkeley)	Dataflow computation, nonprocedural languages, semantics; data types, symbolic logic

GRADUATE COURSES

Students may register for graduate courses only with the approval of the instructor and after consultation with their supervisor. Not all of the following courses will be offered every year. Students who have taken content equivalent courses at the University of Victoria or elsewhere will not be permitted to take these courses again for credit.

C SC 500 (no credit) APPLICATIONS OF COMPUTERS IN RESEARCH

This course provides the introduction to computing that is necessary for some theses projects. It is not open to students registered in a Computer Science degree program.

C SC 505 (2) COMPUTER GRAPHICS

This course provides students with a solid background in interactive, generative graphics techniques and hands on experience programming a modern high resolution, raster display workstation. The course covers the hardware and software structures of modern workstations, raster algorithms and data structures (Bresenham's line and circle algorithms, polygon clipping, region filling, colour), transformations (two and three dimensional translation, scaling, and rotation as matrix operations), viewing and representation of three dimensional shapes, approximation of curves and shapes, hidden line and hidden surface elimination algorithms.

C SC 520 (2) ANALYSIS OF ALGORITHMS

General techniques for designing and analysing algorithms; an in depth examination of several problems and algorithms with respect to their time and space requirements; advanced data structures; sorting and searching; graph algorithms; geometric algorithms; backtracking; NP complete problems; approximation algorithms.

C SC 522 (2) GRAPH ALGORITHMS

The course includes a detailed study, from the algorithmic point of view of some tractable and intractable graph problems. Tractable problems covered include: path problems, spanning trees, network flows, matchings, planarity testing.

The theory of NP completeness is reviewed and applied to graph problems which are apparently intractable, e.g. the clique, independent set, vertex cover, Hamiltonian circuit, Travelling Salesman and colouring problems. Approximation and probabilistic solutions to the intractable problems are discussed.

Models of randomized and parallel computation and their associated complexity classes are outlined and examples of these kinds of algorithms for some graph problems are examined.

C SC 524 (2) COMPUTATIONAL COMPLEXITY

The course covers elements of the theory of computational complexity. Topics covered include: the distinction between tractable and intractable problems; definition of computational models and complexity classes; techniques for comparing the complexity of problems; the classes P (deterministic polynomial time); and NP (nondeterministic polynomial time); P and NP completeness; Auxiliary Pushdown Automata; Alternating Turing Machines; the polynomial time hierarchy; the classes Polynomial Space and Logarithm Space; probalistic complexity classes; models of parallel computation; can all problems in P be effectively parallelized? Randomized parallel computation.

C SC 526 (2) COMPUTATIONAL GEOMETRY

This introductory course covers algorithms and data structures which are used to solve geometrical problems. Topics include geometric searching, convex polygons and hulls, Voronoi diagrams, plane sweep algorithms, promity, and intersections. Application areas which are discussed include computer graphics, VLSI design and graph theory.

C SC 528 (2) COMBINATORIAL ALGORITHMS

This course is concerned with the interfaces between combinatorics and Computer Science. Algorithms and data structures that are used to manipulate, generate, and randomly select combinatorial objects are studied. Such objects include sets, permutations, combinations, trees, graphs. Methods for analyzing combinatorial algorithms such as recurrence relations, asymptotics, and amortized complexity are presented.

C SC 530 (2) ADVANCED COMPILER CONSTRUCTION

This course presents an in depth study of recent developments in the theory and practice of compiler construction. The major topics include: program flow analysis; code optimization; attribute grammars, automatic code generation methods, and incremental compilers.

C SC 532 (2) LOGIC PROGRAMMING

This course provides a theoretical basis for research in logic programming. Emphasis is placed on the unifying role of logic programming. Thus connections are made with the fixpoint semantics of programming languages in general, with relational database theory, with theory of computation, with formal grammars, and with the semantics of functional programming languages. The core material on logic covers: clauses and Herbrand models; Horn clauses; general interpretations; semantics of equality; lambda calculus and its logical reconstruction.

C SC 534 (2) DATAFLOW COMPUTATION

This course is concerned with both software and hardware aspects of the dataflow approach to computation. We will examine various machine architectures and the corresponding dataflow languages. Special attention will be given to software engineering issues, and the students will have access to an interpreter for the dataflow language LUCID.

C SC 536 (2) ADVANCED PROGRAMMING LANGUAGES

This course examines the principles underlying modern programming languages. Topics presented include: functional programming, type systems, polymorphism, higher order objects, modularity, and models of concurrency.

C SC 540 (2) NUMERICAL ANALYSIS: I

Numerical Linear algebra. Topics include: Gaussian elimination and its variants; sparse positive definite linear systems; sensitivity of linear systems; condition and stability; orthogonal matrices and least squares; eigenvalues and eigenvectors; the QR algorithm; the singular value decomposition.

C SC 541 (2) NUMERICAL ANALYSIS: II

A student may take this course more than once for credit, so long as the course content differs. The course consists of a thorough discussion of

a topic selected from the following areas:

541A Approximation theory
541B The numerical solution of differential equations
541C Numerical quadrature
541D Optimization

C SC 545 (2) OPERATIONS RESEARCH: I
This course is primarily concerned with linear programming and its applications. Topics discussed include the following: the simplex method, the revised simplex method, computer implementation of linear programming, duality, dual simplex and primal dual algorithms, parametric analysis and postoptimality analysis.

Applications are selected from: the transportation problem, the assignment problem, blending problems, inventory problems, activity analysis, game theory and network analysis.

C SC 546 (2) OPERATIONS RESEARCH: II
This course provides an introduction to model design using queuing theory and simulation techniques. Topics covered include a brief introduction to queuing theory, basic ideas in simulation, random number generators, sampling, critical event and time slice methods, organization of a simulation study, and basic concepts of simulation programming.

C SC 550 (2) COMPUTER COMMUNICATIONS AND NETWORKS
This course introduces concepts in computer communications and networks. Topics include: layered network architecture, packet switching networks, local area networks, protocol design and verification, network security, and applications in distributed computing.

C SC 552 (2) ADVANCED SWITCHING THEORY
This course covers a selection of topics in switching theory and their application to the design of digital systems. The emphasis is on techniques suited to computer aided design (CAD). Topics to be covered are selected from: formal aspects of switching theory; spectral logic; combinational and sequential circuit synthesis; algorithmic state machines; and the software aspects of hardware design such as hardware description languages.

C SC 554 (2) FAULT TOLERANT COMPUTING
In this course, issues of fault tolerant computing are discussed, ranging from the choice of fault tolerant architectures, to expert systems for the design and test of integrated circuits. Topics include: design and test of defect free integrated circuits, fault modelling, built in self test, data compression, error correcting codes, simulation software/hardware, fault tolerant system design, CAD tools for design for testability.

C SC 556 (2) VLSI DESIGN ALGORITHMS
This course covers algorithmic aspects of the design and application of VLSI circuits and systems. Topics to be covered are selected from: the fundamental components of CAD tools for VLSI design progressing from simple geometric layout packages through to silicon compilation; languages for the description of VLSI systems; simulation at the circuit, switch, functional and behavioural levels; VLSI architectural issues including systolic arrays. Fundamental design principles of VLSI systems are covered.

C SC 558 (2) MULTIPLE VALUED LOGIC AND SWITCHING THEORY
This course gives an introduction to the area of multiple valued logic as an alternative to conventional binary logic. Topics will include: representation of multiple valued functions; simplification and minimization techniques; synthesis and design of multiple valued circuits; multiple valued arithmetic units; multiple valued simulation.

C SC 560 (2) DESIGN AND ANALYSIS OF REAL TIME SYSTEMS
Fundamental issues in the design of real time operating systems and real time application software are presented and analyzed. Typical topics include: hard real time scheduling in centralized and in distributed systems, interrupt driven systems, process communication and synchronization, high level language requirements for real time systems, real time constraints on implementation of synchronization primitives, decomposition of real time requirements into process model, and case studies. A project involving actual design, implementation and testing of a real time executive and real time application software will also be included. (May not be taken by students with credit in 460)

C SC 562 (2) DISTRIBUTED COMPUTING
This course deals with recent developments and advanced research topics in the area of distributed computing. Topics include: distributed operating systems, interprocess communications, remote procedure calls, network transparency, file server, execution location, and failure transparency, fault tolerant distributed systems, process replication, load balancing, task migration and performance issues, interconnection strategies, network configurations, problem decomposition, distributed updating of multiple copies, global object addressing, centralized and decentralized control mechanisms, reliability and the reconnection problem, and finally case studies of some of the more significant distributed systems.

C SC 566 (2) ADVANCED SOFTWARE ENGINEERING
The goal of Software Engineering is the construction of complex, maintainable software at reasonable cost. This course provides the opportunity to gain software engineering experience in a controlled environment. Methods for software specification and design are emphasized. Additional topics may include design for change, configuration management, and software tools.

C SC 568 (2) MODULARIZATION, DATA ABSTRACTION, AND REUSABILITY
In this course the realizations of the concepts of modularization, data abstraction, and reusability are explored in imperative (Modula-2 and Ada) and object oriented (Smalltalk-80 and ML) programming languages. In particular, the focus is on the topics of type systems and polymorphism. A study of the influence of those concepts of the design of software development environments (Rigi and Cedar) is given.

C SC 580 (2) TOPICS IN APPLICATIONS OF COMPUTER SCIENCE
(May be taken for credit more than once, so long as the course content differs)

C SC 581 (2) TOPICS IN ARTIFICIAL INTELLIGENCE
(May be taken for credit more than once, so long as the course content differs)

C SC 582 (2) TOPICS IN THEORETICAL COMPUTER SCIENCE
(May be taken for credit more than once, so long as the course content differs)

C SC 583 (2) TOPICS IN PROGRAMMING LANGUAGES
(May be taken for credit more than once, so long as the course content differs)

C SC 584 (2) TOPICS IN NUMERICAL ANALYSIS AND OPERATIONS RESEARCH
(May be taken for credit more than once, so long as the course content differs)

C SC 585 (2) TOPICS IN HARDWARE AND COMPUTER ARCHITECTURE
(May be taken for credit more than once, so long as the course content differs)

C SC 586 (2) TOPICS IN COMPUTER SYSTEMS AND SOFTWARE
(May be taken for credit more than once, so long as the course content differs)

C SC 587 (2) TOPICS IN INFORMATION SYSTEMS
(May be taken for credit more than once, so long as the course content differs)

C SC 589 (2) GENERAL TOPICS IN COMPUTER SCIENCE
(May be taken for credit more than once, so long as the course content differs)

C SC 591 (2) DIRECTED STUDIES
Individual studies under the direct supervision of a faculty member. The content and evaluation must be approved by the department. (May be taken more than once, so long as course content differs)

C SC 595 (1) SEMINAR (Grading: INP, COM, N or F)
C SC 598 (1-3) MASTER'S PROJECT (Grading: INP, COM, N or F)

C SC 599 (4-6) MASTER'S THESIS (Grading: INP, COM, N or F) **C SC 699 (30) PH.D. DISSERTATION** (Grading: INP, COM, N or F)

EARTH AND OCEAN SCIENCES

Program

The School of Earth and Ocean Sciences offers a graduate program leading to the degree of Master of Science (M.Sc.) and to the degree of Doctor of Philosophy (Ph.D.) in earth and ocean sciences. Research areas include a strong focus on earth system science with special studies in palebiology, sedimentology and stratigraphy, marine geology and geophysics, paleoceanography, geochemistry, biogeochemical cycles, mineral deposit modelling, seismology, biological oceanography, physical oceanography, geophysical fluid dynamics, ocean mixing, ocean acoustics, air-sea interactions, and climate change.

Applicants for a graduate degree in earth and ocean science should normally have a major or honours degree in this or a closely related science. A student who does not have such a degree can be admitted to the program but may be required to complete additional makeup courses. In doing so, the student must obtain a grade of at least B (5.00) in each such makeup course, and an average of B+ (6.00) in the makeup courses. Mature students are advised to consult the Faculty regulations regarding conditional admittance. The spectrum of research in the School is broad and will be attractive to students from many areas of the basic and applied sciences; cross-disciplinary research involving faculty and facilities in other departments is encouraged.

The program of study for each student is determined by the student's Supervisory Committee in consultation with the student. The background strengths and deficiencies of a student will be assessed on entry into the program by the Supervisory Committee through oral and/or written examinations. The Master's Program consists of a minimum of 15 units, which include course work and a Master's thesis (EOS 599). At least 12 units of the Program must be at the 500 level or higher and the remainder at the 400 level or higher.

A student must normally have completed a Master's Program in earth and ocean sciences, or the equivalent, before entering the Ph.D. Program. For students with a Master's degree, the Ph.D. Program consists of a minimum of eight units of course work and a dissertation (EOS 699). For students transferred to a Ph.D. Program with a Bachelor's Degree, a minimum of 16 units of course work and a dissertation are required. Each student must pass the comprehensive examinations and the Ph.D. candidacy examination. The Ph.D. Dissertation must be defended in an oral examination.

Inquiries concerning the graduate program may be addressed to the Graduate Studies Advisor, School of Earth and Ocean Sciences. Application forms for admission, which include the indication of need for financial assistance, be obtained directly from the Faculty of Graduate Studies. Applicants whose native language is not English should write the TOEFL (Test of English as a Foreign Language) and submit the scores to the Faculty of Graduate Studies (see page 229 for Faculty requirements) together with their application forms. Even with passing TOEFL scores, students may be required to take English language courses as well as their other course work.

Facilities

The School offers its graduate students a range of equipment for study and research, and arranges access to some of the equipment in nearby government laboratories. Students have access to the University's IBM 3090 mainframe computer and to the 16.4 metre marine science service vessel JOHN STRICKLAND.

Faculty and Fields of Research

Christopher R. Barnes, B.Sc., Ph.D. (Ottawa), F.R.S.C., Professor and Director of the Centre for Earth and Ocean Research (CEOR)	Paleozoic paleontology, stratigraphy, paleoecology; biological and chemical events in ancient oceans; conodont paleobiology.
Christopher J.R. Garrett, Ph.D. (Cambridge), F.R.S.C., Lansdowne Professor	Physical oceanography, geophysical fluid dynamics and ocean mixing processes.
George D. Spence, Ph.D. (British Columbia), Assistant Professor and University Research Fellow	Refraction and reflection seismology, marine and land-based; geophysics and tectonics of western Canadian margin and Cordillera.
David F. Strong, Ph.D. (Edinburgh), F.R.S.C., Professor and President	Mineral deposits, igneous petrology, and geochemistry; modelling of mineral deposits in space and time.
Verena Tunnicliffe, Ph. D. (Yale), Associate Professor	Evolution of marine communities: hydrothermal vents, seamounts and fjords; interaction with physical and geological processes.
Eileen Van der Flier-Keller, Ph.D. (Western Ontario), Assistant Professor	Geochemistry; coal geology — tectonic setting, depositional environment, mineralogy, geochemistry, specialized element potential; marine sediments — transform faults, hydrothermal activity.
John Weaver, Ph.D. (Saskatchewan), Professor	Geomagnetism; numerical modelling and inversion of electromagnetic induction in the earth and oceans.
Michael Whiticar, Ph.D. (British Columbia), Assistant Professor	Organic geochemistry, especially applied to diagenesis of marine sediments and to petroleum geology; gas hydrates; biogeochemical cycles; greenhouse gases.
Vaughn Barrie, Ph.D. (Cantab.), Adjunct Professor (Pacific Geoscience Centre)	Marine Geology; shelf sedimentation processes; placer deposits.
Brian D. Bornhold, Ph.D. (M.I.T., Wood's Hole), Adjunct Professor (Pacific Geoscience Centre)	Marine geology, sedimentary processes, paleoceanography, marine mineral resources.
Eddy C. Carmack, Ph.D. (Washington), Adjunct Professor (Institute of Ocean Sciences)	Oceanography and climate; circulation and mixing in polar seas and influence on biological processes; physical limnology, especially of ice-covered lakes.
N. Ross Chapman, Ph.D. (British Columbia), Adjunct Professor (Defence Research Establishment Pacific)	Ocean acoustics, acoustic signal processing, ambient noise, marine seismology, seismic inversion methods.
Kenneth L. Denman, Ph.D. (British Columbia), Adjunct Professor (Institute of Ocean Sciences)	Biological/physical oceanographic interactions, ocean biogeochemical fluxes and climate change, marine planktonic ecosystem dynamics, satellite remote sensing.
Harry W. Dosso, Ph.D. (British Columbia), Professor	Geomagnetism: laboratory analogue and numerical modelling of electromagnetic induction in the earth and oceans.

David M. Farmer, Ph.D. (British Columbia), Adjunct Professor (Institute of Ocean Sciences)	Physical oceanography and acoustical oceanography; acoustical studies of processes in the upper ocean boundary layer, air-sea interaction, sea-ice; development of acoustical remote sensing concepts using acoustical backscatter, forward scatter and the interpretation of naturally occurring sound.
Howard J. Freeland, Ph.D. (Dalhousie), Adjunct Professor (Institute of Ocean Sciences)	Physical oceanography, particularly ocean circulation, dynamics of coastal zones, and fjord oceanography.
John R. Harper, Ph.D. (Louisiana), Adjunct Professor, Consultant	Marine geology, especially coastal and nearshore processes, oil spill effects and long-term ecological monitoring; environmental impact of developments in Arctic to tropical coastal environments.
Richard J. Hebda, Ph.D. (British Columbia) Adjunct Professor, Royal B.C. Museum	Quaternary stratigraphy, vegetation and climate change; Holocene palynology with application to interpreting diet, medicine and agriculture of native peoples.
Louis A. Hobson, Ph.D. (Washington), Associate Professor and Chairman of the Department of Biology	Phytoplankton biology and primary productivity, particularly in the North Pacific and fjords.
Roy D. Hyndman, Ph.D. (A.N.U.), F.R.S.C., Adjunct Professor (Pacific Geoscience Centre)	Geophysics, marine and land; active continental margin tectonics and structure; geothermal studies; seismotectonics; magnetotellurics; physical properties of rocks.
Edward Irving, Sc.D. (Cantab.) F.R.S., F.R.S.C. Adjunct Professor (Pacific Geoscience Centre)	Paleomagnetism; global tectonics, tectonics of Cordilleran terranes and extension zones; magnetic overprinting as a tracer of ancient fluid flow; magnetostratigraphy; continental reconstructions; paleobiogeography.
E. Lyn Lewis, Ph.D. (London), Adjunct Professor (Institute of Ocean Sciences)	Polar oceanography: circulation in the Arctic Ocean; microscale processes in the sea ice/sea water phase change; air/sea energy exchanges in polynyas.
Rolf Ludvigsen, Ph.D. (Western Ontario), Adjunct Professor, Consultant	Biostratigraphy evolution and paleontology of Lower Paleozoic trilobites, especially from Newfoundland, Quebec, District of Mackenzie and British Columbia; paleontology of Mesozoic crustaceans.
Rolf Lueck, Ph.D. (British Columbia), Adjunct Professor, John's Hopkins University	Physical oceanography: mixing in central gyres; tracer experiments to test models of interior mixing and study deep ocean bottom boundary layers.
David L. Mackas, Ph.D. (Dalhousie), Adjunct Professor (Institute of Ocean Sciences)	Spatial pattern in pelagic ecosystems, zooplankton feeding and swimming behaviour, interaction of physical and biological processes in the ocean, statistical analysis of plankton community pattern.
André Panteleyev, Ph.D. (British Columbia), Adjunct Professor (B.C. Geological Survey)	Mineral deposits; interrelationships of Cordilleran mineral deposits and the development of genetic ore deposit models.
Garry C. Rogers, Ph.D. (British Columbia), Adjunct Professor (Pacific Geoscience Centre)	Earthquake seismology and related tectonic processes, earth structure using earthquake generated waves, earthquake hazard.
Robert W. Stewart, Ph.D. (Cantab.), F.R.S., F.R.S.C., Adjunct Professor, UVic	Physical oceanography, ocean circulation, ocean turbulence, air-sea interaction, sea-level change.
Christopher J. Yorath, Ph.D. (Queen's), Adjunct Professor (Pacific Geoscience Centre)	Geology and geophysics of Pacific continental margin, especially tectonic and thermal history and petroleum resources.

Note: The above listing includes faculty with research interests related to offerings in the School. Cross appointments are under way and will be listed in the 1992-93 Calendar.

GRADUATE COURSES

Graduate students will have the freedom to take courses from departments other than the School of Earth and Ocean Sciences. Courses offered by the departments of Biology, Chemistry, Computer Science, Electrical and Computing Engineering, Geography, Mathematics and Statistics, Mechanical Engineering, and Physics and Astronomy are likely to be particularly relevant. Permission of the Director and Instructor is a prerequisite for all graduate courses offered by the School. Some courses may require specific undergraduate credit for background preparation. Student academic records will be reviewed on an individual basis at the time of admission.

EOS 500 (1½) MARINE ORGANIC GEOCHEMISTRY

This course tracks the fate of marine organic matter from its formation through its transformation and destruction during depositional, diagenetic (remineralization) and catagenic (petroleum generation) processes. The concepts and analytical techniques of water and interstitial fluid chemistry, geochemical biomarkets, stable isotope geochemistry and petroleum source rock geochemistry are examined.

EOS 501 (1½) GEOCHEMISTRY OF CARBONACEOUS DEPOSITS

A lecture and seminar course examining the geochemical characteristics of fossil fuels. Discussion of geological controls on major and trace element and isotopic signatures of coal, oil, carbonaceous shales, and environmental implications of use.

EOS 503 (1½) GLOBAL BIOGEOCHEMICAL CYCLES

This course tracks the fate of organic matter from its formation (primary production) through its transformation and destruction during transport, depositional, and diagenetic remineralization processes. Global carbon, nitrogen, phosphorous, and sulphur cycles are discussed. Emphasis is placed on describing the fluxes of nutrients and other major compounds within soils, and the sedimentary and water columns, and across their interface.

EOS 504 (1½ or 3) SELECTED TOPICS IN GEOCHEMISTRY

Selected topics in geochemistry will be covered in depth. The course may be repeated with different content (offered as 504A, 504B, 504C, 504D).

EOS (1½) GENESIS OF MINERAL DEPOSITS

A seminar course dealing with the genetic models for metallic mineral deposits. Emphasis will be placed on those deposits associated with oceanic spreading centres and orogenic belts, with particular examples from the Cordillera and Appalachian-Caledonide belts and analysis of the tectonic, chemical and hydrogeologic controls.

EOS 506 (1½) GLOBAL BIOEVENTS AND THE PALEOBIOLOGICAL RECORD

Analysis of major global bioevents in the Phanerozoic paleobiologic record; causes and consequences of extinction bioevents; patterns of adaptive radiation; changes to the planetary biota in relation to continental drift, ocean chemistry and circulation, climate change, and booide impacts.

EOS 507 (1½ or 3) SELECTED TOPICS IN PALEOBIOLOGY

Selected topics in paleobiology will be considered in depth. The course

may be repeated with different content (offered as EOS 504A, 504B, 504C, 504D).

EOS 508 (1½) MARINE GEOLOGY
A seminar course covering modern processes of marine geology, including depositional processes and diagenesis of marine sediments. The course will examine a range of depositional environments: fjord and coastal, shelf, slope, and oceanic; with consideration of the data obtained from DSDP and ODP drilling.

EOS 510 (1½) PLATE TECTONICS: THE GEOLOGICAL RECORD
An examination of the processes of plate tectonics as revealed by the geological record, including Precambrian evolution of cratons; rifts and passive margins; convergent margins and orogens; plate motions through time.

EOS 511 (1½) PLATE TECTONIC PROCESSES
An overview of plate tectonic regimes with emphasis on physical processes and geophysical aspects related to the evolution of the earth's plate system. The course will be organized primarily as seminars and discussions, supplemented by special lectures by faculty and adjuncts.

Courses EOS 516A, 516B, 519A, 519B, 520A and 520B are those previously listed by the Department of Physics and Astronomy, are are now cross-listed by, or offered by, the School of Earth and Ocean Sciences.

EOS 516A (1½) (formerly PHYS 516A) ACCOUSTICS I

EOS 516B (1½) (formerly PHYS 516B) ACCOUSTICS II

EOS 519A (1½) (cross-listed with PHYS 519A) SELECTED TOPICS IN GEOPHYSICS I

EOS 519B (1½) (cross-listed with PHYS 519B) SELECTED TOPICS IN GEOPHYSICS II

EOS 520A (1½) (formerly PHYS 520A) GEOPHYSICAL FLUID DYNAMICS

EOS 520B (1½) (formerly PHYS 520B) ADVANCED GEOPHYSICAL FLUID DYNAMICS

EOS 521 (1½) THE THEORY OF ELECTROMAGNETIC INDUCTION IN THE EARTH
This course provides an introduction to the basic theory and methods of geoelectromagnetic induction. Topics covered include the basic equation of induction; induction in one-dimensional spherical and flat earth models; response functions; the magnetotelluric and magnetovariational methods; one-dimensional inversion of magnetotelluric data; equations of induction in two dimensions; empedance tensor.

EOS 522 (1½) SELECTED TOPICS IN GEO-ELECTROMAGNETIC INDUCTION
This course will develop special areas of geo-electromagnetic induction according to the students' interests. Examples of advanced topics which may be covered are: analytical and numerical modelling of two-dimensional induction phenomena;. scaling equations and methods of laboratory modelling; three-dimensional forward modelling on the computer; topics in inversion theory; decomposition of the impedance tensor.

EOS 523 (1½) SEISMOLOGY
Theoretical and practical aspects of seismic wave propogation, earthquake seismology, and processing and interpretation of reflection and refraction data.

EOS 524 (1½) CRUSTAL GEOPHYSICS
Primarily a seminar course focussing on geophysical properties and processes in the continental crust. Detailed consideration will be given to the deep seismic data generated by the LITHOPROBE, COCORP and COCRUST projects.

EOS 530 (1½) WAVES
Examination of the various solutions of the wave equation that describe types of waves, including acoustic waves, gravity waves, Rossby waves, and interface waves. Wave interactions and generation will be covered, together with the theory and prediction of tides.

EOS 531 (1½) PHYSICAL OCEANOGRAPHY
Physical properties of sea water, equation or state, gravitational stability, large-scale ocean currents, meridional distribution of salinity and temperature, surface heat budgets, water masses, estuary flows.

EOS 532 (1½) DYNAMICAL OCEANOGRAPHY
The circulation of the ocean in response to forcing by wind stress and buoyancy input on a variety of space and time scales is examined. Topics include western intensification (why there is a Gulf Stream), equatorial dynamics and circulation on the continental shelf.

EOS 533 (1½) OCEANIC BOUNDARY LAYERS
The ocean communicates with the atmosphere and solid earth through its boundary layers at the sea surface and ocean floor. The physics of these layers is analyzed with a view to understanding the exchange of momentum, heat and gases. Topics include classical turbulent layer theory and the effects of coherent structures such as Langmuir circulation. The roles of buoyancy flux and sea-floor slope are also examined.

EOS 534 (1½) OCEAN MIXING PROCESSES
The distribution of properties in the ocean and ocean circulation are greatly influenced by small scale processes that cannot be explicitly included in numerical models of the ocean. The physics and parameterization of processes such as breaking internal waves, double diffusion and boundary mixing are analyzed, with discussion of observational techniques as well as thoeries.

EOS 535 (1½) EXPERIMENTAL TECHNIQUES IN PHYSICAL OCEANOGRAPHY
Advances in our understanding of the ocean stem from precise observations in a frequency remote and hostile environment. Techniques for measuring ocean currents and other oceanic properties on scales from millimetres to megametres are reviewed, including a discussion of remote sensing techniques using satellites or ocean acoustics.

EOS 544 (1½ or 3) SELECTED TOPICS IN OCEANOGRAPHY
Selected topics in oceanography will be covered in depth. The course may be repeated with different content (offered as 544A, 544B, 544C, 544D).

EOS 550 (1½) THE OCEAN-ATMOSPHERE SYSTEM
Studies of the earth's climate require an understanding of the intimate links between the ocean and atmosphere. Basic theories of the circulation of each are discussed and the physics of coupled models examined, with emphasis on simple intuition-building mathematical models as well as discussion of large computer models.

EOS 560 (1½) TIME SERIES ANALYSIS
Many data sets in the ocean and earth sciences arise from continuous sampling in either space or time. Analysis techniques are based on spectral (Fourier) decomposition, starting with univariate analysis and progressing to concepts such as frequency-domain empirical orthogonal functions. Techniques of statistical prediction are also outlined.

EOS 570 (0) SEMINAR
Participation in a program of seminars by internal and external speakers designed to provide discussion to topics beyond those covered in courses taken for credit.

EOS 580 (1 to 3) DIRECTED STUDIES
A course designed to enable students to pursue individual interests. (May be taken more than once for credit).

EOS 599 (credit to be determined, but normally 6 units) M.Sc. THESIS
The thesis or dissertation requirement for advanced degrees (599 or 699) applies to all students in the School. (Grading: INP, COM, N or F)

EOS 699 (credit to be determined) Ph.D DISSERTATION
The thesis or dissertation requirement for advanced degrees (599 or 699) applies to all students in the School. (Grading: INP, COM, N or F)

ECONOMICS

The Department of Economics offers courses of study in applied economics leading to the degree of Master of Arts. The program is designed to provide students with the analytical expertise and practical knowledge to excel in positions in research and analysis in the private and public sectors of the economy. Areas of concentration are available in: Regional Economics, Urban Economics, Methodology of Applied Economics, International Trade, Economic Development, Public Finance, Economic History, Human Resources (including Labour Economics, Health Economics, Education Economics, the Economics of Crime), Natural Resource and Environmental Economics, Econometrics, Applied Mathematics in Economics, Monetary Policy, Industrial Organization and Public Policy, and other areas which may be arranged in consultation with the Department.

Admission

An undergraduate degree in Economics or its equivalent, with at least a B average in the last two years leading to the degree, is required for admission. Applicants must have mastered basic techniques of mathematics and statistics and have demonstrated competence in economic theory and applied areas. Students with insufficient background in economics will normally be required to complete a "qualifying year" prior to admission to the M.A. program. All students normally enroll in Economics 504A and B, Mathematical and Statistical Methods for Economists. (504A and B are offered during Registration Week and during the first week of fall classes.) The Faculty of Graduate Studies and/or the Graduate Adviser may require any student to complete the Graduate Record Exams (G.R.E.), including the aptitude and subject area tests; students whose native language is not English must comply with Faculty of Graduate Studies requirements for competency in English (i.e., TOEFL may be required).

Program

The M.A. in Economics is a program requiring a minimum of 15 units which can be completed within 12 to 15 months from the date of entry. Specific program requirements are as follows:

1. Successful completion of the core program (6 units), consisting of 500, 501, 545 and 555.
2. Successful completion of an additional 4½ units of courses (exclusive of 504A/B) subject to the approval of the student's Supervisory Committee. Courses are normally chosen from the graduate course offerings of the Department, but may include up to three units of courses numbered at the 400 level as well as graduate courses in other departments. Students are encouraged to apply to individual instructors for Directed Studies (595) courses.
3. Successful completion of a formal thesis prospectus.
4. Successful completion of a Master's thesis. The thesis is awarded 4½ units.

Cooperative Option

The cooperative education option extends the regular program to include at least eight months of work in government or industry. The option provides a unique opportunity not only to 'learn and earn' but also to gain practical experience in applied economics. The work periods are an integral part of the student's program. Research undertaken during the work period may be used to provide the basis for the student's thesis.

Faculty and Major Areas of Research

Kenneth L. Avio, Ph.D. (Purdue)	Law and economics, economics of crime, price theory
Robert L. Bish, Ph.D. (Indiana)	Public choice theory, subnational government organization, coastal resources management
James Cutt, Ph.D. (Toronto)	Public finance, human resources policy, economic development and planning
A.R. Dobell, Ph.D (M.I.T.)	Formation and evaluation of public policy, policy analysis
Donald G. Ferguson, Ph.D. (Toronto)	International trade, mathematical economics, comparative systems
J. Colin H. Jones, Ph.D. (Queen's)	Industrial organization, microeconomic theory
Leonard Laudadio, Ph.D. (Washington)	Microeconomic theory, environmental economics, industrial organization
James J. McRae, Ph.D. (Western Ontario)	Microeconomics, international trade, regional economics, transportation economics
Carl Mosk, Ph.D. (Harvard)	Japanese economic development, economic demography
Serge Nadeau, Ph.D. (Carnegie-Mellon)	Econometrics, microeconomics, public finance
Malcolm Rutherford, Ph.D. (Durham)	History of economic thought, methodology, resource economics
Joseph Schaafsma, Ph.D. (Toronto)	Health economics, human resources, public finance
John A. Schofield, Ph.D. (Simon Fraser)	Regional economics, benefit/cost theory
Nancy M. South, Ph.D. (Toronto)	Economic history, labour economics
Kenneth G. Stewart, Ph.D. (Michigan)	Econometrics, monetary theory
William D. Walsh, Ph.D. (Yale)	Labour economics
Gerald R. Walter, Ph.D. (California)	Urban economics, natural resources
Anming Zhang, Ph.D. (British Columbia)	Industrial organization, microeconomic theory, international economics

GRADUATE COURSES

Students should consult the Department concerning courses offered in a particular year.

ECON 500 (1½) MICROECONOMICS
Analysis of methods used to derive testable hypotheses concerning the behaviour of consumers, firms, and markets. Discussion of theoretical foundations of concepts widely used in applied economics (e.g., consumer surplus analysis, the behaviour of firms under regulatory constraint, production economics). Readings in selected areas of the applications of microeconomic theory. (*Corequisite:* 504 or equivalent)

ECON 501 (1½) MACROECONOMICS
Review of the Keynesian and classical models. An examination of the component sectors of these models. Topics may also include uncertainty, the role of lags in determining time paths and policy effects, adjustment processes. Where possible, illustrations and exercises are based on estimated macroeconometric models.

ECON 502 (1½) HISTORY AND METHOD OF ECONOMICS
Seminar in selected issues in the history and methodology of economics. Topics may range over the work of particular authors or schools, the problems of theory selection, and the philosophy of science as applied to economics.

ECON 504A (formerly half of 504) (4/5) MATHEMATICAL METHODS FOR ECONOMISTS
A survey of the mathematical methods most frequently used in Economics. The topics covered include: the calculus of functions of several variables, the properties of homogeneous functions, the implicit function theorem, matrices, systems of equations, constrained and unconstrained optimization, the envelope theorem, the general method of comparative statics. (Grading: INC, COM, N or F)

ECON 504B (formerly half of 504) (4/5) STATISTICAL METHODS FOR ECONOMISTS
A survey of the statistical techniques most frequently used in economics. Topics covered include probability theory, sampling theory, confidence intervals, hypothesis testing, regression and correlation.
(Grading: INC, COM, N or F)

ECON 505A (formerly half of 505) (1½) THE THEORY OF INTERNATIONAL TRADE
A study of international production and exchange. The topics covered include: the nature and source of the gains from trade; the determinants of international production and comparative advantage; international factor mobility and transnational production; the implications of market imperfections; trade and growth. Particular attention is given to the generality of theoretical propositions and their empirical applications. (*Prerequisite:* 500 or 405A or equivalent)

ECON 505B (formerly half of 505) (1½) THEORY OF TRADE POLICY
An examination of selected contributions to the theory of tariffs and other trade restrictions, and an analysis of trade policy for the developed and developing countries. (*Prerequisite:* 500 or 405A or equivalent)

ECON 506 (1½) MONETARY THEORY AND POLICY
The examination of selected contributions to contemporary monetary theory and policy, and their relationship to macroeconomics. Topics may include the introduction of monetary elements into macroeconomic models, with emphasis on wealth effects and budget constraints; the theory of the demand and supply of money; interest rate and monetary policy; an introduction to rational expectations and New Classical macroeconomic theory.

ECON 510 (1½) INDUSTRIAL ORGANIZATION AND PUBLIC POLICY
Seminar in the structure and performance of industrial markets with special emphasis on the problems of maintaining effective competition in Canada.

ECON 512 (1½) URBAN ECONOMICS
Theory and policy of the urban economy. Topics include the macroeconomics of urban growth, stagnation and decline; the neoclassical theory of the urban economy; the economics of housing, land use, intraurban location and urban environmental quality.

ECON 513 (1½) REGIONAL ECONOMIC DEVELOPMENT
Selected analytical approaches to regional economic development. Topics include theories of location and growth, techniques of analysis and assessment of policy alternatives.

ECON 515 (1½) LABOUR ECONOMICS
Seminar in labour economics and collective bargaining, including wage and employment theory, collective bargaining systems, theory of labour movement, and public policy in collective bargaining.

ECON 516 (1½) COST BENEFIT ANALYSIS
Theoretical issues in project and program analysis. Selected applications in such areas as human resource economics, natural resource and recreation economics, economic development, subnational planning.

ECON 517 (1½) THE ECONOMICS OF CANADIAN HEALTH CARE
Analysis of the structure, function and performance of the medical market with emphasis on physician and hospital services.

ECON 518 (1½) ECONOMIC ANALYSIS OF LAW AND CRIME
Intensive investigation of efficiency aspects of accident, property, contract and criminal law; theoretical and empirical analysis of criminal behaviour and of the criminal justice system.

ECON 519 (1½) THE ECONOMICS OF EDUCATION
A discussion of theoretical and empirical issues in the demand for and supply of education. Topics to be examined will include the consumption and investment aspects of the demand for education, the optimal supply and pricing of education, and the relationship between factor input and output in the educational process.

ECON 520 (1½) ECONOMIC DEVELOPMENT
Seminar to examine selected issues in the theoretical models of economic development, factors in economic development, strategy of economic planning, and financing of economic development.

ECON 521 (1½) ECONOMIC HISTORY
Seminar in selected topics in economic history including the approach and contributions of "the new economic history", theories of long-run economic growth, history and analysis of long-run economic growth in selected countries, and new work in the literature.

ECON 525 (1½) PUBLIC FINANCE AND FISCAL POLICY
Seminar in selected topics in fiscal policy and public finance including the incidence and effects of taxation, government expenditure programs and public debt operations.

ECON 527 (1½) MANAGERIAL ECONOMICS
The application of economic principles and methodologies to the decision making process within the organization under conditions of certainty and uncertainty. Topics include pricing decisions, product strategy, capital budgeting.

ECON 528 (1½) OPERATIONS RESEARCH
The application of mathematical models to decision problems within the organization. Topics include Markov models, linear and dynamic programming, queuing theory and simulation.

ECON 529 (1½) ECONOMICS OF FINANCE
The basic theory of finance under uncertainty. Topics include expected utility maximization, state preference theory, analysis of capital asset pricing, and option pricing.

ECON 530 (1½) ECONOMICS OF NATURAL RESOURCES
Seminar in the economics of natural resources including a survey of relevant theoretical literature and selected topics covering problems of resource industries.

ECON 531 (1½) ENVIRONMENTAL ECONOMICS
Seminar in selected issues in environmental economics. Topics to be covered may include problems of externalities, liability rules, various models of the interaction between economic and environmental processes, measurement of consumers' surplus in the case of environmental goods and the debate concerning the limits to growth.

ECON 532 (1½) ECONOMIC AND BUSINESS FORECASTING
The application of various methods and techniques for economic and business forecasting. Topics include statistical decision theory, adaptive models, single and simultaneous structural equation models, and input-output analysis.

ECON 540 (1½) MATHEMATICAL ECONOMICS
Selected topics in the application of mathematics to economic theory. The topics include the theory of general economic equilibrium and the theory of economic growth.

ECON 545 (1½) ECONOMETRICS
Estimation and hypothesis testing in the classical linear regression model. Linear restrictions; dummy variables; multicollinearity; specification error. Extensions of the classical model to handle heteroskedasticity, serial correlation and simultaneity.

ECON 546 (1½) ADVANCED TOPICS IN ECONOMETRICS
Selected topics in Econometrics. Topics may include: Maximum likelihood estimation and testing; intrinsically nonlinear models; univariate time series analysis.

ECON 550 (1½) SOVIET ECONOMICS
The structure and functioning of Soviet and Eastern European economies. Theory and practice of socialist pricing; planning; economic development; problems of measurement and comparisons with Western economies.

ECON 555 (1½) METHODS OF APPLIED ECONOMICS
An intensive investigation of certain empirical methods widely used in

applied economics. Topics will be chosen from the areas of forecasting, simulation, linear and nonlinear programming, input output analysis, data access, survey techniques and other applied methods.

ECON 561 (1½) APPLIED ECONOMICS SEMINAR: I
The seminar consists of two modules of instruction in different areas of Applied Economics. Each module is taught for three hours per week, the first module during the first six weeks of the term, the second module during the last six weeks of the term. Module topics are announced in the term preceding the term in which the seminar is offered. The grade for the seminar is the mean grade in the two modules.

ECON 562 (1½) APPLIED ECONOMICS SEMINAR: II
The seminar consists of two modules of instruction in different areas of Applied Economics. Each module is taught for three hours per week, the first module during the first six weeks of the term, the second module during the last six weeks of the term. Module topics are announced in the term preceding the term in which the seminar is offered. The grade for the seminar is the mean grade in the two modules.

ECON 563 (1½) APPLIED ECONOMICS SEMINAR: III
The seminar consists of two modules of instruction in different areas of Applied Economics. Each module is taught for three hours per week, the first module during the first six weeks of the term, the second module during the last six weeks of the term. Module topics are announced in the term preceding the term in which the seminar is offered. The grade for the seminar is the mean grade in the two modules.

ECON 595 (1½) DIRECTED STUDIES IN ECONOMICS
Individual titles will be assigned to each lettered section (A-Z)

ECON 599 (4½) THESIS (Grading: INP, COM, N or F)

EDUCATION

MASTER OF ARTS

The Faculty of Education offers programs leading to the Master of Arts degree in the following areas:

Curriculum Studies
Educational Psychology:
— Learning and Development
— Measurement, Evaluation & Computer Applications in Education
— Counselling Psychology in Education
— Special Education
Educational Administration
Curriculum and Instruction:
— English Language Arts
— Mathematics
— Music
— Physical Education
— Science
— Social Studies
— Sport and Exercise Studies

These programs require at least 18 units of course work, including thesis, of which no more than six units may be at the 300 or 400 level. A research based thesis must be written and successfully defended in an oral examination.

In addition to the usual admission requirements of the Faculty of Graduate Studies, individual departments may require relevant professional experience.

MASTER OF EDUCATION

The Faculty also offers programs leading to the degree of Master of Education in the following areas:

Art Education
Coaching Studies
Counselling
Curriculum Studies
Educational Administration
English Language Arts
Mathematics
Music
Physical Education
Science
Social Studies
Special Education

The general regulations for this degree are as follows:

(i) The Master of Education degree will require at least 18 units of course work, of which no more than six units may be at the 300 and 400 level. A comprehensive final examination (written and/or oral) will be required. A Project in research and/or curriculum development may be required as determined by the Faculty of Education.

(ii) The usual admission requirements of the Faculty of Graduate Studies should be met and, in addition, applicants must have had at least two years of successful relevant professional experience.

However, applicants who do not meet the normal admission requirements of the Faculty of Graduate Studies may be granted conditional admission to the M.Ed. program, provided the applicant:

(a) holds a recognized bachelor's degree
(b) has successful relevant professional experience for a minimum of five years as attested to by at least two supervisors of the applicant's work
(c) is recommended for admission by the Faculty of Education and approved by the Admissions Committee of the Faculty of Graduate Studies.

Formal admission to the M.Ed. program for conditionally admitted students will be granted to those who achieve a B (5.00 G.P.A.) average, with no grade less than a B- (4.00 G.P.A.) on the first nine units of work in the program.

MASTER OF SCIENCE

The School of Physical Education offers a program leading to the degree of Master of Science in Sport and Exercise Studies. This program requires at least 18 units of course work of which no more than six units may be at the 300 or 400 level. At least three of the elective units must be science based. A research based thesis must be written and must be successfully defended in an oral examination. A more detailed description of all Master's degree programs may be obtained from the general office, School of Physical Education.

DOCTOR OF PHILOSOPHY

The Faculty also offers programs leading to the Ph.D. degree in Educational Psychology and Language Arts.

ADMISSION DEADLINES

The Faculty of Education will observe the following deadlines for initial applications to all programs:

January 1:
For applicants seeking priority consideration for counselling Master's degree programs.

February 15:
For applicants seeking Scholarships and Fellowships. (In the event of enrollment limitations, preference will be given to applicants meeting this deadline.)

February 28:
For applicants seeking admission to the following Summer Studies.

April 30:
For applicants seeking admission in September to the following Winter Session.

October 15:
For applicants seeking admission in January of the current Winter Session. (Not all departments admit students in January.)

Faculty and Areas of Research

Sheilah M. Allen, Ph.D. (British Columbia)	Secondary reading, English education, teacher training
John O. Anderson, Ph.D. (Alberta)	Educational measurement and evaluation.
Robert J. Anthony, Ph.D. (Toronto)	Developmental language arts; cross cultural education; applied linguistics
Daniel G. Bachor, Ph.D. (Toronto)	Children with learning problems, instruction for exceptional children
Laurie Rae Baxter, Ph.D. (Ohio)	Art education criticism, cross cultural aesthetics, arts administration and cultural policy
Frederick I. Bell, Ed.D. (North Carolina-Greensboro)	Teaching effectiveness, motor skill acquisition, elementary school physical education
Robert D. Bell, Ph.D. (Oregon)	Secondary school physical education, athletic injuries, aging and physical activity
Donald L. Bergland, Ed.D. (British Columbia)	Aesthetics; social and cultural foundations; creativity in studio productions; video and multi-media production
I.K. Burbank, Ed.D. (Utah State)	Methodology in teaching Mathematics, curriculum development in elementary mathematics, measurement of math attitudes
Gerald A. Carr, Ph.D. (Stellenbosch)	Historical and comparative physical education, biochemical analysis — gymnastics and track and field
Rey A. Carr, Ph.D. (California)	Preventive counselling, communication skills, learning styles, peer counselling
Franklin E. Churchley, Ed.D. (Columbia)	Music curriculum development: elementary and secondary, early childhood music, piano in music education
Martin L. Collis, Ph.D. (Stanford)	Theory and practice of physical fitness and fitness testing, human response to hypothermia and exercise stress
Deborah Court, Ed.D. (Brit. Col.)	Critical thinking, cooperative learning, teachers' practical knowledge
David Docherty, Ph.D. (Oregon)	Motor development and maturation, acquisition of motor skills, curriculum development
Lily Li-Chu Dyson, Ph.D. (Saskatchewan)	Families of handicapped children; socialization of children with a handicapped sibling; early childhood special education; children's self-concept; observational study of child development
Peter O. Evans, Ph.D. (Alberta)	The nature and development of language abilities, the development of word meaning, computers in education
Pierce Farragher, Ph.D. (Pennsylvania State)	Elementary and secondary science methodologies, computer application in science education
Thomas G. Fleming, Ph.D. (Oregon)	Social thought and education, historical study in administration.
Robert H. Fowler, Ph.D. (Duke)	Social studies education (secondary), curriculum development and implementation
M. Honoré France, Ed.D. (Massachusetts)	Career and vocational counselling, cross cultural counselling, gerontology and counselling
Leslee G. Francis, Ph.D. (Brigham Young)	Secondary mathematics methodologies, measurement and evaluation, computer applications in mathematics education
Noel Gantly, Ed.D. (Brigham Young)	Elementary music methodologies, developmental theory, research in music in early childhood and contextualism in teacher education
Betty Anne Hanley, Ph.D. (Minnesota)	Foundations in music education, elementary music methods, choral music, Q methodology.
W. John Harker, Ed.D. (British Columbia)	Discourse processing from an educational perspective; contemporary literary theory and its implications for teaching English literature at the secondary and post-secondary levels; the semiotic study of educational events.
C. Brian Harvey, Ph.D. (Ohio State)	Helplessness in children and adolescents, manifest needs in counsellors, learning and development
Geoffrey G. Hett, Ph.D. (Oregon)	Teacher education, behavioural counselling, special education
Jennifer L. Hill, Ed.D. (Northern Colorado)	Special education, integration of exceptional children, early intervention, children with visual impairments
Geoffrey S. Hodder, M.A. (Victoria)	Art curriculum, aesthetic judgmental process
Christopher E. Hodgkinson, Ed.D. (British Columbia)	Educational administration: values and organization, theory, philosophy of administration. Philosophy: values education, policy analysis, organizational analysis
Dawn C. Howard, Ph.D. (Simon Fraser)	Cognition and instruction; learning strategies; motivation; adolescent psychology
Bruce L. Howe, Ph.D. (Oregon)	Sport psychology, curriculum development, children's play
John J. Jackson, Ph.D. (Alberta)	Educational administration; recreation administration; diffusion of innovations
Terry D. Johnson, Ed.D. (British Columbia)	Children's literature, psycholinguistic approaches to reading instruction, reading comprehension
Donald W. Knowles, Ph.D. (Alberta)	Developmental psychology, children's imaginative abilities, children's responses to life crises, gifted children
Che Kan Leong, Ph.D. (Alberta)	Developmental dyslexia, processes of reading and its difficulties, psycholinguistic aspects of reading and amorphemic script (Chinese)
Werner W. Liedtke, Ph.D. (Alberta)	Elementary mathematics, early childhood education
Yvonne M. Martin-Newcombe, Ph.D. (McGill)	Educational administration: administrative theory, organization theory. School law
Margie I. Mayfield, Ph.D. (Minnesota)	Early childhood education and language arts
Ian McDougall, M.Mus. (British Columbia)	Jazz studies in education

R. Dale McIntosh, Ph.D. (Washington)	Choral and instrumental music, music history, computers in music education
Norma I. Mickelson, Ph.D. (Washington)	The nature and development of reading abilities, teacher education, computers in education
Walter Muir, Ph.D. (Alberta)	Learning, measurement, computer applications
Peter J. Murphy, Ph.D. (Alberta)	Organizational change and development, organizational theory, educational leadership, comparative and international education
Douglas R. Nichols, Ph.D. (Oregon)	Recreation and leisure for the disabled, outdoor leisure pursuits
Antoinette A. Oberg, Ph.D. (Alberta)	Curriculum theory, curriculum design, development and evaluation, naturalistic modes of inquiry
Lloyd O. Ollila, Ph.D. (Minnesota)	Early learning, developmental and remedial reading
Arthur V. Olson, Ed.D. (Boston)	Reading, development and administration/supervision of the reading program
Leslie H. Peake, M.Sc. (Springfield)	Elementary school physical education, motor performance of young children
R. Vance Peavy, D.Ed. (Oregon)	Human science and sociodynamic orientations in counselling theory and practice, qualitative and interpretive research methods
Geoffrey D. Potter, Ph.D. (Sheffield)	Educational technology
Alison Preece, Ph.D. (Victoria)	Language development; language play; early literacy; early childhood education
Ted J. Riecken, Ed.D. (British Columbia)	School culture and the ethnology of schooling. Educational change and innovation. Applications of computer technologies to social studies education
Margaret B. Robertson, Ph.D. (Saskatchewan)	Writing development; language in education; teacher education
John J. Sheppy, M.Ed. (British Columbia)	Secondary School science education, science-technology-society evaluation and assessment
Gloria J. Snively, Ed.D. (British Columbia)	Science education, environment education, marine education, curriculum development.
Vernon J. Storey, Ed.D. (British Columbia)	Leadership development, politics of education, organizational change.
Paul F. Thomas, Ph.D. (Toronto)	Geography methods, international development education, adult education, transpersonal and depth psychology, qualitative, phenomenological and action research, metaphoric consciousness in relation to values education, quantitative methods for geography teachers, curriculum studies
Beverly A. Timmons, D.Ed. (Oregon)	Delayed auditory feedback, stuttering, analysis of speech
H. David Turkington, Ed.D. (Washington State)	Elementary and secondary school physical education, curriculum development
Max R. Uhlemann, Ph.D. (Colorado State)	Competency based training of professional and paraprofessional counsellors, interviewing strategies, environmental assessment, stress in the classroom
Geraldine H. Van Gyn, Ph.D. (Alberta)	Cognitive factors in skill learning and performance, dance in education
James H. Vance, Ph.D. (Alberta)	Mathematics education
Howard A. Wenger, Ph.D. (Alberta)	Physiology of sport and fitness
Richard L. Williams, Ph.D. (Washington State)	Elementary science, measurement and evaluation, metric education
Larry D. Yore, Ph.D. (Minnesota)	Science education, reading in science, attribute-treatment interactions
William M. Zuk, Ph.D. (Oregon)	Cross cultural, early childhood and art education

GRADUATE COURSES

Students should consult the Graduate Programs Office in the Faculty of Education concerning the courses offered in any particular year; such offerings will depend upon student program needs and the availability of instructors.

(A) ARTS IN EDUCATION

Dr. F.E. Churchley, Graduate Adviser

ED-A 502 (1½) COMPUTERS IN MUSIC EDUCATION (ADVANCED)
Advanced applications of the use of computers in music education. MIDI-based technology and hands-on experience will be emphasized.

ED-A 520 (2) JAZZ ARRANGING
Exposure to and experience with various arranging techniques, and participation in the jazz emsemble.

ED-A 521 (2) JAZZ REPERTOIRE ANALYSIS AND REHEARSAL TECHNIQUES
A study of jazz performance techniques and literature, applications to education, and participation in the jazz ensemble.

ED-A 540 (1½) RESEARCH IN CURRICULUM AND INSTRUCTION IN THE ELEMENTARY GRADES — MUSIC
Review of the literature; critical analysis of significant research; planning curriculum research at the elementary school level.

ED-A 541 (1½) RESEARCH IN CURRICULUM AND INSTRUCTION IN THE SECONDARY GRADES — MUSIC
Review of the literature; critical analysis of significant research; planning curriculum research at the secondary level.

ED-A 550 (3) RESEARCH AND EVALUATION IN MUSIC EDUCATION
Students are introduced to the various research methods used in music education. Evaluation in music education at all levels is included.

ED-A 552 (1½) ADVANCED SEMINAR IN MUSIC EDUCATION
Survey of recent literature in the field, identification of current issues, problems of professional development vis-a-vis advanced study in Music Education.

ED-A 558 (1½) DEVELOPMENT AND IMPLEMENTATION OF THE CURRICULUM IN A SPECIFIC AREA — ART AND MUSIC
Application of relevant theories and models to the design and development of school curricula in a specific area.

558A Art
558M Music

ED-A 590 (credit to be determined) SPECIAL PROBLEMS — ART AND MUSIC
(May be taken more than once for credit providing the course content is different from that previously taken. The student must obtain consent of the chair of the student's supervisory committee and the instructor offering the area of individual study prior to registering in this course.)

ED-A 591 (1½ or 3) SELECTED TOPICS IN EDUCATION
(This is a variable content course. Students will be permitted to take it more than once for credit to a maximum of six units, provided the course content is different from that previously taken. A Pro Forma indicating the title, content, and method of evaluation will be included in each student's portfolio.)

ED-A 597 (0) COMPREHENSIVE EXAMINATION — ART AND MUSIC
Comprehensive examination which must be passed as required for individual Master of Education programs within the Faculty of Education
(Grading: INP, COM, N or F)

ED-A 598 (credit to be determined) PROJECT — ART AND MUSIC
(Grading: INP, COM, N or F)

ED-A 599 (credit to be determined) THESIS — ART AND MUSIC
(Grading: INP, COM, N or F)

(B) COMMUNICATION AND SOCIAL FOUNDATIONS

Dr. A. Olson, Language Arts Adviser
Dr. M. Mayfield, Early Childhood Education Adviser
Dr. P.J. Murphy, Administration Adviser
Dr. A. Oberg, Curriculum Studies Adviser
Dr. G. Potter, Educational Technology Adviser

ED-B 520 (3) SEMINAR IN PHILOSOPHY OF EDUCATION
An analysis of the theories of leading contemporary thinkers as they relate to basic values, purposes and problems in public education.

ED-B 521 (3) EDUCATIONAL CLASSICS
A study in depth of certain selected "great books" that have had significant influence upon educational thought and practice.

ED-B 531 (3) CONCEPTS AND THEORY IN ADMINISTRATION
Critical examination of the classical and modern literature of administrative studies within organizational perspectives, with emphasis on administrative philosophy, decision making processes, power and authority, leadership studies, and general systems theory.

ED-B 532 (1½ or 3) ADMINISTRATION OF THE EDUCATIONAL PROGRAM
Examination of approaches to, and problems associated with, the implementation, coordination, supervision, and evaluation of the school's instructional programs.

ED-B 533 (1½ or 3) CRITICAL DETERMINANTS OF ADMINISTRATION
(May be taken once for credit in each of the areas listed below)

533A Politics and Governance of Education
An analysis of the electoral processes in public education, the forces which emanate from and impinge on elected educational officials, the activities of special interest groups, and the resulting implications for appointed administrators.

533B The Law and Education
The study of Federal and Provincial statutes, Ministerial regulations, school board policies, and pertinent court decisions as they impinge, legally, upon the role of the educational administrator.

533C Educational Finance
An analysis of the funding of public education, with emphasis upon general principles of finance, governmental structures, taxation procedures, resource allocation, and budgetary practices, with a specific focus on the British Columbia scene.

ED-B 534 (1½ or 3) ORGANIZATIONAL ANALYSIS AND DEVELOPMENT
A review of strategies for change and development in educational organizations, with special attention to survey research, action research, organizational diagnosis, team building, and overcoming organizational resistance.

ED-B 535 (1½ or 3) COMPARATIVE ADMINISTRATION
(May be taken once for credit in each of the areas listed below)

535A Regional Comparisons
Comparative studies of educational administration and systems in Canada and selected foreign countries.

535B Institutional Comparisons
Selected cross organizational studies in public, military, hospital, and commercial administration.

ED-B 536 (1½ or 3) PHILOSOPHY OF ADMINISTRATION
An examination through a case study approach, of the relevant interaction of philosophy and administration, with a view to clarifying philosophical concepts and theories and their application to the analysis, by administrators, of their own and others' behaviour.

ED-B 537 (1½ or 3) TASKS AND PROCESSES OF ADMINISTRATION
(May be taken once for credit in each of the areas listed below)

537A Planned Change
An analysis of the processes associated with planned change in public education, with a view to assisting administrators to facilitate such change.

537B Decision Making
A study of the factors affecting, and processes involved in, effective decision making by educational administrators.

537C Leadership
An examination of general leadership theories, leadership styles, and leadership effectiveness models as they apply to educational administrators.

537D Instructional Supervision
Through an analysis of literature in leadership, communication, change and activation, as well as through an analysis of classroom observation techniques, the development of rational organizational patterns of supervision for educational administrators.

537E Personnel Management
An examination of the personnel function within educational institutions, with emphasis upon effective personnel policies, recruitment and selection, placement, professional development, promotion and performance evaluation.

537F Policy Making
An analysis of the nature of policy development and policy execution at provincial and school district levels, and the implications for educational administrators.

537G The Principalship
Analysis of the role of the school principal, with emphasis upon legal status, administrative tasks, and managerial performance.

537H Educational Planning
A review of the concepts, approaches and actual practice of educational planning of both macro- and micro levels of activity. New features of planning will be examined for improving the design or policies and the operational procedures of educational organizations.

ED-B 540 (3) RESEARCH IN CURRICULUM AND INSTRUCTION — LANGUAGE AND READING
Review of the literature; critical analysis of significant research; planning research in curriculum and instruction. (*Prerequisite:* 342, 343 and 349 or equivalent)

ED-B 541 (3, formerly 1½) RESEARCH IN CURRICULUM AND INSTRUCTION IN THE SECONDARY GRADES — ENGLISH
Review of the literature; critical analysis of significant research; planning curriculum research at the secondary level.

ED-B 542 (3) READING PROCESSES IN THE SCHOOL CURRICULUM
An intensive examination of the acquisition and the development of reading competence, focusing on the cognitive and linguistic processes. The course will include an analysis of reading research, methods and materials. (*Pre-or corequisite:* 540 or consent of instructor)

ED-B 543 (3) LANGUAGE PROCESSES IN THE SCHOOL CURRICULUM
An intensive examination of the processes through which competence in listening, speaking and writing is developed and of the products which result. The course will include an analysis of language research, methods and materials. (*Pre-or corequisite:* 540 or consent of instructor)

ED-B 544 (3) ADVANCED COURSE IN REMEDIAL READING
This course focuses on theoretical and practical issues in the causation, diagnosis, and remediation of reading difficulties as these are encountered in the school setting. Seminar discussions will centre on the research literature relevant to reading difficulties; the practical component will involve students in working in a clinical setting with children with reading problems. (*Prerequisite:* 342/343)

ED-B 545 (1½) THE READING CURRICULUM IN THE SECONDARY SCHOOL: THEORY AND PRACTICE
This course will focus on issues in the definition, development and function of secondary school developmental, corrective, and remedial reading programs. The course will also consider the role of the reading consultant in program implementation. (*Prerequisite:* 342/343C)

ED-B 546 (1½) THE YOUNG CHILD IN TODAY'S SOCIETY
An examination of the young child's status, role and future in the context of Canadian society from the integration of the educational, legal, anthropological, developmental, sociological and historical perspectives.

ED-B 547 (1½) CONTEMPORARY TRENDS IN EARLY CHILDHOOD EDUCATION
An in-depth analysis of current trends in early childhood education, such as early intervention, parent involvement, child advocacy and other relevant topics.

ED-B 548 (1½) ISSUES IN PROGRAM DEVELOPMENT FOR EARLY CHILDHOOD EDUCATION
Applications of curriculum theory and practice to early childhood education. The course will include both subject areas such as reading readiness and number awareness as well as topical areas such as program evaluation, planning and agents for change.

ED-B 549 (3) COMPARATIVE EARLY CHILDHOOD EDUCATION
A synthesis of international approaches to early childhood education emphasizing the comparative evaluation of programs.

ED-B 550 (1½) SEMINAR: RESEARCH IN EARLY CHILDHOOD EDUCATION
Analysis, interpretation, and evaluation of selected research in early childhood education through study of its conceptual and methodological bases. (*Prerequisite:* A minimum 1½ units of graduate level early childhood education or permission of program coordinator. *Corequisites:* Education-D 560 and 561)

ED-B 555A (1½) FOUNDATIONS OF CURRICULUM STUDIES
Philosophical foundations in the study of education and curriculum: (1) conceptions of education and curriculum; (2) philosophical justifications of educational and curriculum practice; (3) historical perspectives; (4) criteria for judging education and curriculum practice; and (5) a personal stance.

ED-B 555B (1½) FOUNDATIONS OF CURRICULUM STUDIES
Further development and elaboration of topics in 555A. (*Prerequisite:* 555A)

ED-B 556 (1½) CURRICULUM DEVELOPMENT
A description of a variety of selected approaches to curriculum planning. This course aims to compare traditional Tylerian approaches to curriculum planning with alternative approaches in terms of their origins, underlying assumptions, utility in various settings, and effects. The course provides the students the opportunity to identify and characterize their own approaches to curriculum planning.

ED-B 557 (1½) CURRICULUM IMPLEMENTATION
A description of selected approaches to curriculum implementation. This course aims to describe and compare problems, practices, and models of implementing curriculum at institutional and individual levels and to provide students the opportunity to extract principles and procedures applicable to their own situations.

ED-B 558 (1½) DEVELOPMENT AND IMPLEMENTATION OF THE CURRICULUM IN A SPECIFIC AREA
Application of relevant theories and models to the design and development of school curricula in a specific area. (Students may enroll in more than one of the areas listed below at 1½ units each.)

558A Language
558B Reading
558C English

ED-B 580 (1½) INTERPRETIVE INQUIRY
A basic introduction to various forms of human science research such as ethnography and phenomenology with special emphasis on the contribution of such approaches to professional practice.

ED-B 590 (credit to be determined) SPECIAL PROBLEMS — COMMUNICATION AND SOCIAL FOUNDATIONS
(May be taken more than once for credit providing the course content is different from that previously taken. The student must obtain consent of the chair of the student's supervisory committee and the instructor offering the area of individual study prior to registering in this course.)

ED-B 591 (1½ or 3) SELECTED TOPICS IN EDUCATION
(This is a variable content course. Students will be permitted to take it more than once for credit to a maximum of six units, provided the course content is different from that previously taken. A Pro Forma indicating the title, content, and method of evaluation will be included in each student's portfolio.)

ED-B 597 (0) COMPREHENSIVE EXAMINATION — COMMUNICATION AND SOCIAL FOUNDATIONS
Comprehensive examination which must be passed as required for individual Master of Education programs within the Faculty of Education. (Grading: INP, COM, N or F)

ED-B 598 (credit to be determined) PROJECT — COMMUNICATION AND SOCIAL FOUNDATIONS
(Grading: INP, COM, N or F)

ED-B 599 (credit to be determined) THESIS — COMMUNICATION AND SOCIAL FOUNDATIONS (Grading: INP, COM, N or F)

ED-B 642 (3) ADVANCED PROCESSES OF READING
Advanced study and research of the acquisition and development of reading competence with special attention to psycholinguistic and neurological processes. (*Prerequisite:* 542 or suitable equivalent)

ED-B 643 (3) ADVANCED LANGUAGE PROCESSES IN THE SCHOOL CURRICULUM
Advanced study and research of the processes through which competence and performance in listening, speaking, and writing are developed. (*Prerequisite:* 543 or suitable equivalent)

ED-B 644 (3) RESEARCH FOUNDATIONS FOR REMEDIAL READING
Critical review and analysis of research in diagnosis, correction and remediation of reading difficulties; criteria for appraising research findings; educational implications. (*Prerequisites:* 442 and 544 or suitable equivalents)

ED-B 647 (3) ADVANCED COURSE IN SECONDARY ENGLISH EDUCATION
Advanced study of the processes of learning English language and literature in the secondary grades. (*Prerequisite:* 547 or suitable equivalent)

ED-B 649 (3) DOCTORAL SEMINAR IN ENGLISH LANGUAGE ARTS
A seminar at the doctoral level to consider special problems in education and educational research. Seminars are organized around educational theory and practice in the English Language Arts.

ED-B 690 (1½ or 3) INDIVIDUAL STUDIES — COMMUNICATION AND SOCIAL FOUNDATIONS
Under the direction of program supervisors, topics in the area of research interests of doctoral students will be examined, leading to the development of background material for a Ph.D. dissertation. (*Prerequisites:* Appropriate prerequisites to be determined in specific instances) (May be taken more than once for credit providing the course content is different from that previously taken)

ED-B 691 (1½ or 3) SPECIAL PROBLEMS — COMMUNICATION AND SOCIAL FOUNDATIONS
Issues pertaining to students' research interests and faculty expertise will be examined. (*Prerequisites:* Appropriate prerequisites to be determined in specific instances) (May be taken more than once for credit providing content is different from that previously taken)

ED-B 699 (30) PH.D. DISSERTATION — COMMUNICATION AND SOCIAL FOUNDATIONS (Grading: INP, COM, N or F)

(C) PHYSICAL EDUCATION

Dr. Robert D. Bell, Graduate Adviser

ED-C 540 (1½) RESEARCH IN CURRICULUM AND INSTRUCTION IN THE ELEMENTARY GRADES — PHYSICAL EDUCATION
Review of the literature; critical analysis of significant research; planning curriculum research at the elementary school level.

ED-C 541 (1½) RESEARCH IN CURRICULUM AND INSTRUCTION IN THE SECONDARY GRADES — PHYSICAL EDUCATION
Review of the literature; critical analysis of significant research; planning curriculum research at the secondary level.

ED-C 558 (1½) DEVELOPMENT AND IMPLEMENTATION OF THE CURRICULUM IN A SPECIFIC AREA — PHYSICAL EDUCATION
Application of relevant theories and models to the design and development of school curricula in a specific area.

ED-C 570 (1½) SKILL ACQUISITION IN PHYSICAL EDUCATION AND SPORT
A review of learning theories and principles as they pertain to the acquisition and retention of motor skills; the neural mechanisms involved in the learning and control of motor patterns; information processing in human performance; detailed study of research on memory, attention, retrieval systems, and movement control.

ED-C 571 (1½) PHYSICAL EDUCATION AND SPORT IN SOCIETY
The following represent topics which may be studied in depth: socialization into sport; institutionalized aggression in sport; current social problems in Canadian sport; comparative sport; the social history of sport in Canada; sport and international relations; the political economy of sport; a macrosociological view of sport development; social psychology of sport (motivation, personality, attitudes, social structure, group cohesion, and leadership).

ED-C 572 (1½) PHYSIOLOGY IN PHYSICAL EDUCATION AND SPORT
The study of physiological basis for sport performance and fitness. The assessment of physiological status and the rationale for the prescription of exercise programs. (*Prerequisite:* 441 or consent of instructor)

ED-C 573 (1½) RESEARCH PROCESSES IN PHYSICAL EDUCATION AND SPORT STUDIES
Students are introduced to the varieties of research methods used in physical education and sport studies (e.g., physiological, psychological, sociological, historical).

ED-C 574 (1½) ADMINISTRATION OF PHYSICAL EDUCATION, RECREATION AND SPORT
After presenting a theoretical base for administrative and organizational theories, a link will be made to specific situations in the fields of physical education, recreation, and sport.

ED-C 575 (1½) PSYCHOLOGICAL ASPECTS OF PHYSICAL EDUCATION AND SPORT
A study of the interrelationships between psychological and physical factors which occur in the pursuit of physical activity and competitive sport, from birth to maturity. Topics will include aggression in sport; personality development through physical activity; attribution theory and sport; motivation in sport; behavioural modification and physical activity; affiliation and sport; skill and mental achievement.

ED-C 576 (1½) TEACHING AND COACHING EFFECTIVENESS IN PHYSICAL EDUCATION AND SPORT
A review of current models of effective teaching and coaching; observation and coaching systems; analysis of teaching and coaching behaviours; a review of current research.

ED-C 577A (1½) SEMINAR IN COACHING STUDIES: A
A study of the problems in coaching and the research methods available for examination of these problems. (*Prerequisite:* Enrollment in the M.Ed. Coaching Studies Cooperative Program) (Taught in Summer only)

ED-C 577B (1½) SEMINAR IN COACHING STUDIES: B
A continuation of 577A with special attention to the discussion of cooperative experiences and the development of projects for study. (*Prerequisite:* 577A)

ED-C 578 (1½) BIOMECHANICS
A study of athletic performance by way of the laws of physics and mechanics. Topics include:
1. A review of the fundamental laws of physics and mechanics
2. A critical analysis of selected sport skills and techniques

ED-C 590 (credit to be determined) SPECIAL PROBLEMS — PHYSICAL EDUCATION
(May be taken more than once for credit providing the course content is different from that previously taken. The student must obtain consent of the chair of the student's supervisory committee and the instructor offering the area of individual study prior to registering in this course.)

ED-C 591 (1½ or 3) SELECTED TOPICS IN EDUCATION
(This is a variable content course. Students will be permitted to take it more than once for credit to maximum of six units, provided the course content is different from that previously taken. A Pro Forma indicating the title, content, and method of evaluation will be included in each student's portfolio.)

ED-C 597 (0) COMPREHENSIVE EXAMINATION — PHYSICAL EDUCATION
Comprehensive examination which must be passed as required for individual Master of Education programs within the Faculty of Education. (Grading: INP, COM, N or F)

ED-C 598 (credit to be determined) PROJECT — PHYSICAL EDUCATION (Grading: INP, COM, N or F)

ED-C 599 (credit to be determined) THESIS — PHYSICAL EDUCATION (Grading: INP, COM, N Or F)

(D) PSYCHOLOGICAL FOUNDATIONS IN EDUCATION

Specialty areas within the Department (Counselling, Special Education, Learning and Development, and Computer Applications) have additional admission requirements and application deadlines. Prospective applicants should consult with the appropriate Graduate Adviser for the degree and specialty area.

Dr. R.A. Carr, Counselling (M.A. and M.Ed.)
Dr. D. Knowles, Other areas and Ph.D. programs

ED-D 500 (1½) LEARNING PRINCIPLES
A survey of the literature on commonly stated principles of instrumental and classical conditioning, generalization, transfer, and retention.

ED-D 501 (1½) THEORY OF MEASUREMENT
An elaboration of the principles and theories of educational and psychological measurement with particular emphasis on interpretation of test reviews, applications to test development, and the design of research studies.

ED-D 502 (1½) SEMINAR IN EDUCATIONAL EVALUATION
Advanced topics in educational evaluation including: curriculum evaluation, teacher evaluation, grading and reporting.

ED-D 503 (1½) CURRICULUM EVALUATION
An examination of the issues, practices, and models of curriculum evaluation at the institutional and classroom levels.

ED-D 504 (1½) PSYCHOLOGY OF CONCEPTUAL LEARNING
An analysis of the problems, methods, theoretical formulations, and experimental evidence in contemporary concept learning research.

ED-D 505 (1½) BASIC CONCEPTS IN HUMAN DEVELOPMENT
A survey of a number of well known schools and theorists in human development. Topics relating to cognitive, personality, and moral development are stressed. Student needs and interests are important in determining course content.

ED-D 506 (1½) SELECTED TOPICS IN HUMAN DEVELOPMENT
Recent theory and research in a number of specific areas of human development. This course constitutes a closer and more detailed study of certain of the broader areas dealt with in 505.

ED-D 507 (1½) PSYCHOLOGY OF INDIVIDUAL DIFFERENCES
A focus on intellectual, emotional, physical and cultural differences between individuals. Emphasis is given on how individuals differ, causation theories, and implications for education.

ED-D 508 (1½) THEORIES OF LEARNING
A survey of psychological interpretations of learning, comparing modern Behaviourist and Cognitive approaches; historical perspective also given.

ED-D 509 (1½) PSYCHOLOGY OF CLASSROOM LEARNING
An in depth analysis of selected issues in classroom learning. The effects of student and teacher characteristics, pedagogical methodologies, and evaluational strategies on student learning are the major interest areas.

ED-D 510 (1½) PSYCHOLOGY OF GROUP DIFFERENCES
Analysis of group differences in human abilities including historical background, classification and measurement methodology, correlates and educational implications.

ED-D 512 (1½) MEASUREMENT IN THE AFFECTIVE DOMAIN
Problems in selecting objectives in the affective domain; constructing instruments to assess interests, attitudes, appreciations and values.

ED-D 513 (1½) USE OF STANDARDIZED TESTS IN EDUCATION
Advanced study of the theory, purposes, uses, administration, scoring and interpretation of group tests commonly used in schools. Includes tests of aptitudes, achievement, interests, and personality. (*Prerequisite:* 337 or equivalent)

ED-D 515 (1½) ADVANCED DIAGNOSIS OF LEARNING DISABILITIES
An individualized course for graduate students specializing in diagnosis. Supervised observation and analysis of the intellectual, emotional, and educational problems of children with learning difficulties. (*Prerequisite:* 402, 415, or consent of instructor)

ED-D 516 (1½) ADVANCED REMEDIATION OF LEARNING DISABILITIES
An individualized course for graduate students specializing in the remediation of learning problems associated with physical, language, intellectual, emotional, and perceptual dysfunction. Observation, practice, and seminar discussion will be involved. (*Prerequisite:* 515 or consent of instructor)

ED-D 517 (1½ or 3) PRACTICA IN COUNSELLING
(May be taken once for credit in each of the areas listed below, normally to a maximum of 6 units, with a maximum of 3 units in each area. Prior to registration, a student is required to obtain consent from the instructor of the specific practicum and from the chair of his or her supervisory committee.) (Grading: INC, COM, N or F)

517A Prepracticum in Counselling
517B Initial Practicum in Counselling
517C Practicum in Child Counselling
517D Practicum in Adolescent Counselling
517E Practicum in Adult Counselling
517F Practicum in Creative Arts Therapy
517G Practicum in Community Agency Counselling
517H Practicum in Family Counselling
517J Prepracticum in Vocational Counselling (*Corequisite:* 519H)
517K Practicum in Consultation (*Pre-or corequisite:* 519K)
517L Practicum in College and University Counselling
517M Practicum in Skill Training for Helpers

ED-D 518 (1½) SEMINAR IN COUNSELLING PSYCHOLOGY
Origin, development and data bases for counselling. Core elements in counselling. The life cycle, developmental needs and counselling. Contemporary counselling approaches.

ED-D 519 (1½) ADVANCED SEMINARS IN COUNSELLING PSYCHOLOGY
(May be taken once for credit in each of the areas listed below (1½ units each). Prior to registration, a student is required to obtain consent of the seminar instructor and from the chair of the student's supervisory committee.)

519A School Counselling
519B Research in Counselling
519C Professional Issues in Counselling
519D Creative Arts Therapy
519E Cognitive Behavioural Approaches in Counselling
519F Human Science Counselling
519G Relationship Counselling
519H Career and Life Planning Counselling
519J Peer Counselling in Education
519K Consultation in Education and Counselling
519L Group Counselling
519M Gestalt Counselling

ED-D 520 (1½ or 3) EDUCATIONAL RESEARCH APPRENTICESHIP
This course is intended to provide experience for students in conducting research, prior to designing and implementing their own thesis studies. Examples might include collaboration with other students in a joint research effort; replicating earlier studies; or carrying out research principally conceptualized by, and supervised by, an individual professor. (May be taken more than once for credit with approval of the student's supervisory committee)

ED-D 560 (1½) STATISTICAL METHODS IN EDUCATION
Probability theory; sampling theory; estimation; tests of hypotheses; the distribution; analysis of variance; analysis of covariance; nonparametric statistics; introduction to computer applications. (Offered conjointly with 561)

ED-D 561 (1½) METHODS IN EDUCATIONAL RESEARCH
The role of research in education; selecting the problem; reviewing the literature; research hypotheses; problems in measurement; sources of invalidity; models and designs in research; writing research proposals, communicating the results of research. (Offered conjointly with 560)

ED-D 562 (1½) ADVANCED STATISTICAL METHODS IN EDUCATION
Applied multiple linear regression; factor analysis; discriminant function analysis; canonical correlation; multivariate analysis of variance;

advanced computer data processing. (*Prerequisite:* 560 or equivalent)

ED-D 565 (1½) TASK ANALYSIS AND PRECISION TEACHING
Task analysis models and applications; systematic description and assessment of terminal and enroute behavioural objectives; writing individual instructional plans.

ED-D 566 (1½ or 3) SEMINAR IN SPECIAL EDUCATION
A consideration of historical perspectives and present trends in special education theory and practice. (This course is offered in two sections as described below.)

ED-D 566A (1½) Issues
A consideration of historical perspectives and present trends in special education services; funding policies, mainstreaming and zero rejection; training and utilization of aides and volunteers; parent participation in education planning. (Grading: INP or grade.) (Not available for credit on a degree program for students who have completed 566B)

ED-D 566B (3) Research
A consideration of historical perspectives and present trends in special education, theoretical and practical issues in research and service delivery options, legal and financial policies, preparation of personnel, and assessment alternatives. (Not available for credit on a degree program for students who have completed 566A)

ED-D 567 (1½) SEMINAR IN SINGLE SUBJECT RESEARCH DESIGNS
This course is intended to provide students with both an understanding of single subject research designs and experience in critically evaluating research that has been conducted using this methodology. Topics considered will include both pre-experimental and experimental designs, data evaluation techniques, and the evaluation of the application of single subject designs to specific populations of individuals with exceptionalities.

ED-D 590 (credit to be determined) SPECIAL PROBLEMS — PSYCHOLOGICAL FOUNDATIONS
(May be taken more than once for credit providing the course content is different from that previously taken. The student must obtain consent of the chair of the student's supervisory committee and the instructor offering the area of individual study prior to registering in this course.)

ED-D 591 (1½ or 3) SELECTED TOPICS IN EDUCATION
(This is a variable content course. Students will be permitted to take it more than once for credit to a maximum of six units, providing the course content is different from that previously taken. A Pro Forma indicating the title, content, and method of evaluation will be included in each student's portfolio.)

ED-D 597 (0) COMPREHENSIVE EXAMINATION — PSYCHOLOGICAL FOUNDATIONS
Comprehensive examination which must be passed as required for individual Master of Education programs within the Faculty of Education. (Grading: INP, COM, N or F)

ED-D 598 (credit to be determined) PROJECT — PSYCHOLOGICAL FOUNDATIONS (Grading: INP, COM, N or F)

ED-D 599 (credit to be determined) THESIS — PSYCHOLOGICAL FOUNDATIONS (Grading: INP, COM, N or F)

ED-D 617 (credit to be determined) INTERNSHIP IN COUNSELLING PSYCHOLOGY
Field work and advanced practical experience under supervision for doctoral candidates specializing in counselling psychology. (May be taken more than once for credit with approval of the student's supervisory committee.)

ED-D 618 (credit to be determined) DOCTORAL SEMINARS IN COUNSELLING PSYCHOLOGY
The doctoral seminars are organized around professional studies in counselling; counselling theory and techniques; group procedures and processes; areas of critical life choice; professional identification; ethics; and research in counselling. The seminars may be taken more than once for credit, providing the course content is different from that previously taken, by doctoral candidates upon consultation with the student's supervisory committee. The specific content of each area will be designated prior to registration.

ED-D 690 (credit to be determined) SPECIAL PROBLEMS
(May be taken more than once for credit providing the course content is different from that previously taken. The student must obtain consent of the chair of the supervisory committee and the instructor offering the area of individual study prior to registering in 690.)

ED-D 699 (credit to be determined) Ph.D. DISSERTATION
(Grading: INP, COM, N or F)

(E) SOCIAL AND NATURAL SCIENCES

Dr. R. Williams, Graduate Adviser

ED-E 540 (1½) RESEARCH IN CURRICULUM AND INSTRUCTION IN THE ELEMENTARY GRADES
Review of the literature; critical analysis of significant research; planning curriculum research at the elementary school level. (Students may enroll in more than one of the areas listed below at 1½ units each.)

540C Social Studies
540D Mathematics
540E Science

ED-E 541 (1½) RESEARCH IN CURRICULUM AND INSTRUCTION IN THE SECONDARY GRADES
Review of the literature; critical analysis of significant research; planning curriculum research at the secondary level. (Students may enroll in more than one of the areas listed below at 1½ units each.)

541B Geography
541C History
541D Mathematics
541E Science

ED-E 558 (1½) DEVELOPMENT AND IMPLEMENTATION OF THE CURRICULUM IN A SPECIFIC AREA
Application of relevant theories and models to the design and development of school curricula in a specified area. (Students may enroll in more than one of the areas listed below at 1½ units each.)

558C Social Studies
558D Mathematics
558E Science
558H Geography
558J History

ED-E 584 (1½) MATHEMATICS EDUCATION FOR EXCEPTIONAL STUDENTS
A compendium of diagnostic models and teaching or remediation strategies for the following categories: Perceptual and Cognitive Processing Deficits: Socially and Emotionally Impaired; Slow Learning and Mentally Retarded; Visually Impaired; Deaf or Hard of Hearing. (*Prerequisite:* 484 or consent of the instructor)

ED-E 590 (credit to be determined) SPECIAL PROBLEMS — SOCIAL AND NATURAL SCIENCES
(May be taken more than once for credit providing the course content is different from that previously taken. The student must obtain consent of the chair of the student's supervisory committee and the instructor offering the area of individual study prior to registering in this course.)

ED-E 591 (1½ or 3) SELECTED TOPICS IN EDUCATION
(This is a variable content course. Students will be permitted to take it more than once for credit to a maximum of six units, provided the course content is different from that previously taken. A Pro Forma indicating the title, content, and method of evaluation will be included in each student's portfolio.)

ED-E 597 (0) COMPREHENSIVE EXAMINATION — SOCIAL AND NATURAL SCIENCES
Comprehensive examination which must be passed as required for individual Master of Education programs within the Faculty of Education. (Grading: INP, COM, N or F)

ED-E 598 (credit to be determined) PROJECT — SOCIAL AND NATURAL SCIENCES (Grading: INP, COM, N or F)

ED-E 599 (credit to be determined) THESIS — SOCIAL ANDNATURAL SCIENCES (Grading: INP, COM, N or F)

ELECTRICAL AND COMPUTER ENGINEERING

Programs

The Department of Electrical and Computer Engineering offers programs of study leading to the degrees of Master of Engineering (M.Eng.), Master of Applied Science (M.A.Sc.) and Doctor of Philosophy (Ph.D.).

The M.Eng. program consists of eighteen units of course work and must include the course ELEC 598, M.Eng. Project. The M.A.Sc. program consists of a minimum of nine units of course work plus a thesis of twelve units.The Ph.D. program includes a dissertation and a minimum of nine or eighteen units of courses, depending on whether the student is admitted with a master's degree or is transferred to a Ph.D. program with a bachelor's degree.

Subject to the approval of the Department, and the appropriate Faculty regulations, a certain amount of the course work may consist of 400 level undergraduate courses taken in the Department of Electrical and Computer Engineering and graduate courses taken from other departments.

The Department participates in the Cooperative Education Program of the Faculty of Graduate Studies.

All graduate students admitted after September 1989 are required to participate in a program of Seminars (ELEC 509) every year of their program as an addition to the normal program, except by Departmental permission.

Facilities

The Department has excellent computer facilities and equipment which enable faculty and students to carry out research in communications and signal processing, microwaves, computer engineering, VLSI circuit design, AI and expert systems, automatic control, robotics and power electronics.

The main engineering computing facility is a SUN 3/280 Data Centre Server which is accessed via ethernet by terminal servers. We support 64 of these terminals for faculty, graduate student and undergraduate student use. Our system is complemented by two more SUN 3/280 systems and an IBM 3090 vector super-computer in the Computing Centre at the University of Victoria. These systems are available for general computing 24 hours a day, 7 days a week.

The Department operates a workstation laboratory which services several graduate and undergraduate courses and is also available for research. This laboratory comprises six Sun workstations and peripheral devices networked via ethernet including an HP 7580B plotter and a laser printer. The software is available for CAD design, circuit analysis, schematic capture, simulation of digital circuits, VLSI design, AI and expert systems development, technical wordprocessing, etc. The Department has, in addition, eleven other Sun workstations, two IBM PC/RT, a microexplorer, and numerous IBM Pcs and Macintoshes. The Departmental laboratories are well equipped with state of the art measuring equipment, such as Wiltron and HP microwave vector and scalar network analyzers up to 110 GHz, millimeter wave signal generators, spectrum, logic and parameter analyzers, pulse and function generators, oscilloscopes, a PUMA 500 robot arm, a MATROX frame grabber, an image display system, a Cook Vacuum Products CV-301 sputtering system, a Wentworth probing station, an HP parametric analyzer, an IMS-XL60 chip tester and a complete printed circuit board design and fabrication facility.

Admission Deadlines

The Department of Electrical and Computer Engineering will observe the following deadlines for initial applications to all programs:

January 15:
For applicants seeking Scholarships and Fellowships and for admission to the Summer Session commencing in May.

March 15:
For applicants seeking admission in September.

September 15:
For applicants seeking admission in January.

Applications

Initial inquiries regarding graduate studies in Electrical Engineering should be addressed to the Graduate Adviser, Department of Electrical and Computer Engineering. Application forms may be obtained from the Graduate Admissions and Records office.

Faculty and Research Interests

Panajotis Agathoklis, Dr.Sc.Tech. (Swiss Fed. Inst. of Tech.)	Control systems; multidimensional systems; image processing
Andreas Antoniou, Ph.D. (London)	Analog and digital filter design; digital signal processing; electronic circuits; optimization methods
Vijay K. Bhargava, Ph.D. (Queen's)	Digital communications; error-correcting codes, application of neural networks and expert systems in communications; mobile communications; spread spectrum
Ashoka K.S. Bhat, Ph.D. (Toronto)	Power electronic controls; high-frequency link power conversion-resonant and pulse with modulation; applications of new power devices; design of electronic circuits for power control
Jens Bornemann, Dr.-Ing. (Bremen)	Microwave theory, circuits, components, systems and subsystems
James S. Collins, Ph.D. (Washington)	Underwater acoustic telemetry: marine robotics; intelligent control
Nikitas J. Dimopoulos, Ph.D. (Maryland)	Multiprocessor systems architecture; distributed operating systems; expert systems; neural networks
Peter F. Driessen, Ph.D. (British Columbia)	Data communications, radio communications networks; computer communications; cellular radio
David M. Farmer, Ph.D. (British Columbia)	Acoustic measurement of ocean processes; signal processing in ocean acoustics
Fayez El Guibaly, Ph.D. (British Columbia)	VLSI design
Jonathan M.-S. Kim, Ph.D. (Toronto)	Power Electronics
R. Lynn Kirlin, Ph.D. (Utah State)	Digital signal processing: speech, image, seismic data; sensor array processing; adaptive filters; parameter estimation; noise suppression
Harry H.L. Kwok, Ph.D. (Stanford)	Semiconductor devices and IC design
Kin F. Li, Ph.D. (Concordia)	Computer architecture; distributed artificial intelligence; expert systems
Warren D. Little, Ph.D. (British Columbia)	Microcomputer architecture and applications; logic design
Wu-Sheng Lu, Ph.D. (Minnesota)	Control aspects of robotics; multidimensional signal processing; systems theory
Eric G. Manning, Ph.D. (Illinois)	Computer networks; distributed computing

Ruediger Vahldieck, Dr.-Ing. (Bremen)	Microwave theory and techniques; CAD of integrated microwave and millimeter wave circuits; numerical methods in electromagnetics; optical and quasi-optical signal transmission systems
Qiang Wang, Ph.D. (Victoria)	Digital communications; spread spectrum communications; error correction coding; mobile communications
Adam Zielinski, Ph.D. (Wroclaw)	Underwater acoustic systems; acoustic communications and telemetry; ocean electronic instrumentation; signal acquisition and processing; electronic circuits

GRADUATE COURSES

Not all the following courses will be offered in a particular year. Students should consult the Graduate Adviser to determine the courses which will be offered this year.

Students who have taken content equivalent courses at the University of Victoria or elsewhere will not be permitted to take these courses again for credit.

ENGINEERING COURSES

ELEC 501 (1½) LINEAR SYSTEMS (formerly ENGR 501)
State space description of systems. Controllability, observability and minimality. Stability and the Lyapunov criterion. Linear state feedback, asymptotic observers and compensator design. Polynomial and matrix fraction descriptions.

ELEC 503 (1½) ENGINEERING DESIGN BY OPTIMIZATION: I (formerly ENGR 503)
The steepest descent and Newton methods for unconstrained optimization. Golden section, quadratic and cubic line searches. Design of engineering systems such as nonrecursive digital filters by using a line search. Conjugate and Quasi-Newton methods for unconstrained minimization. The Fletcher-Reeves algorithm, and Fletcher algorithm with inexact line search. Design of engineering systems such as recursive digital filters by using multivariable optimization algorithms. Introduction to constrained optimization and applications to the design of engineering systems.

ELEC 504 (1½) RANDOM SIGNALS (formerly ENGR 504)
Review of random variables. Moments and characteristic functions. Random processes, noise model, stationarity and ergodicity. Correlation and power spectrum, spectra measurements. Response of linear systems to random inputs, cross spectral densities. Narrow band noise. Introduction to discrete time and space processes. Markov chains and elementary queues.

***ELEC 505 (1½) ENGINEERING APPLICATIONS OF ADVANCED MATRIX ANALYSIS METHODS (formerly ENGR 505)**
SV, LU, QR, polar and other matrix decompositions. Eigen-Analysis of various dynamic systems. Spectral perturbation theory. Applications in digital signal processing, control systems and mechanical engineering. Computational considerations. Introduction to available numerical software. (*Prerequisites:* MATH 133, ELEC 458 or equivalent)

ELEC 601 (1½) STOCHASTIC CONTROL (formerly ENGR 601)
Concepts of stochastic processes and stochastic state models. Analysis of dynamical systems whose inputs are stochastic processes. Minimal variance control strategies for discrete systems. Sensitivity and stability aspects of the optimal systems. Self tuning regulators. Prediction and estimation techniques. State estimation for discrete systems and Kalman-Bucy filters. (*Prerequisite:* ELEC 460 or equivalent)

ELEC 603 (1½) ENGINEERING DESIGN BY OPTIMIZATION: II (formerly ENGR 603)
Constrained optimization based on the barrier and penalty methods. Design of engineering systems under constraints such as one dimensional digital filters satisfying prescribed specifications. Minimax methods and their application to the design of engineering systems such as two dimensional digital filters. The Remez exchange algorithm and its application to the design of engineering systems such as one dimensional nonrecursive digital filters. (*Prerequisite:* 503)

ELECTRICAL ENGINEERING COURSES

ELEC 509 (1) SEMINAR
Participation in a program of seminars. Required of all graduate students every year of their program as an addition to the normal program except by Departmental permission. One unit of credit shall be given upon completion. (Grading: INP, COM, N or F)

ELEC 511 (1½) ERROR CONTROL CODING TECHNIQUES IN COMMUNICATION
Communication channels and the coding problem. Important linear block codes (cylic, Hamming, BCH and RS codes). Encoding and decoding with shift registers. Threshold decoding. Introduction to convolutional codes. Coding and system design considerations.

***ELEC 512 (1½) DIGITAL COMMUNICATIONS**
Source and channel descriptions. Source digitization, entropy and the rate distortion tradeoff, lossless source codes (Huffman and run length codes), optimal and adaptive quantization. Digital modulation techniques, optimal coherent receivers, performance evaluation, the incoherent case. Special topics — case studies, fiber optics, satellite systems, mobile radio systems. (*Prerequisite:* 504 or equivalent)

ELEC 513 (1½) DATA AND COMPUTER COMMUNICATIONS
Analysis and design of computer communication networks. Queueing theory. Circuit, message and packet switching. Modems, multiplexors and concentrators. Network topologies. Routing and flow control. Multiple access techniques. Capacity calculations. Throughput/delay tradeoffs. Multilayer protocols and the OSI model. Survey of existing data networks, including local area networks. Packet radio and broadcast schemes.

ELEC 521 (1½) MICROWAVE AND MILLIMETER WAVE ENGINEERING
Introduction to theory and technique of modern microwave and millimeter wave engineering. Emphasis is on millimeter wave engineering aspects. Atmospheric microwave and millimeter wave (mmw) propagation. Propagation in other media. MMW tubes and solid state devices. Properties of various planar transmission lines at millimeter wavelength. Quasi-planar transmission media. Finlines and related E plane structures. Dielectric waveguides, H guides, Image lines. Microwave and millimeter wave integrated circuits (mic's). CAD aspects of mic's: filters, matching networks, directional couplers, nonreciprocal devices. Nonlinear devices. (*Prerequisites:* 404 and 454, or equivalent)

ELEC 522 (1½) ANTENNAS
Maxwell's equations. Retarded potential functions. The Hertzian dipole. Antenna parameters. Reciprocity theorem. Plane wave polarization. Dipole antennas. Aperture and slot antennas. Patch antennas. Antenna arrays. Plane reflectors. Paraboloidal reflectors. Subreflector systems. Reflector arrays. Traveling wave antennas. Antennas with special properties. (*Prerequisites:* 404 and 454, or equivalent)

ELEC 531 (1½) DIGITAL FILTERS: I
Introduction of the digital filter as a discrete system. Discrete time transfer function. Time domain and frequency domain analysis. Structures for recursive and nonrecursive digital filters. Application of digital filters for the processing of continuous time signals. Solution of the approximation problem in recursive and nonrecursive filters. Quantization effects. (*Prerequisite:* 408 or equivalent)

ELEC 532 (1½) MULTIDIMENSIONAL DIGITAL SIGNAL PROCESSING
Two and multidimensional signals. Two dimensional sampling. Multidimensional discrete Fourier transform. Design and implementation of two dimensional systems. Stability of two dimensional recursive filters and finite wordlength effects. Application in image processing, seismic

signal processing and beamforming. (*Prerequisite:* 458 or equivalent)

ELEC 535 (1½) PATTERN RECOGNITION (formerly ELEC 585)
Parallel and sequential recognition methods. Bayesian decision procedures, perceptions, statistical and syntactic approaches, recognition grammars. Feature extraction and selection, scene analysis, and optical character recognition. (*Prerequisite:* 400)

***ELEC 541 (1½) VLSI TECHNOLOGY**
Alloyed contacts, diffusion techniques, diffusion theory, four point probe, ion implantation, epitaxial growth, silicon diode formation, photolithography, window opening, selected metallization, diode and transistor fabrication, junction depth determination, junction capacitance for general profile, fabrication of monolithic integrated circuits, isolation, junction capacitors, diffused resistors, mask making, device mounting, thin film passive components, thick film components, integrated circuit layout, MOS gate voltage, MOS integrated circuits. (*Prerequisite:* 320 or equivalent)

ELEC 542 (1½) ANALOG INTEGRATED CIRCUIT DESIGN
Review of IC technology, device models and feedback. Design of monolithic op amp, regulators, multipliers, oscillators, phase-locked loops and other nonlinear circuits. Study and design of filter circuits, switched-capacitor circuits, CCD and other sampled-data circuits. System applications of analog-digital LSI. (*Prerequisites:* 380, 320 or equivalent)

ELEC 543 (1½) DESIGN OF VLSI SYSTEMS
A structured design methodology which enables a digital system designer to exploit the architectural possibilities of the silicon integrated circuit (IC) technology with only a relatively elementary knowledge of device physics or electronic circuit design. A large part of the course will be devoted to design projects leading to generated intermediate files for IC fabrication. (*Prerequisites:* 415, CENG 440 and C SC 230 or equivalent)

***ELEC 544 (1½) ANALOG VLSI AND NEURAL SYSTEMS**
Review of basic electronics; model of the neuron and its signal propagation. Amplifiers, networks and analog VLSI circuits. Time-varying signals and transient effects. The axon: its operation and its equivalent circuit. Models of the visual system and the auditory system and their chip implementation. Tactile sensor arrays and motion sensor arrays and their networking. Optical sensor arrays and their signal transmission. Other devices and circuits relevant to neural networks. (*Prerequisities:* 310, 320 and 380 or equivalent.)

***ELEC 551 (1½) COMPUTER CONTROLLED SYSTEMS**
Sampling of continuous time signals. Process oriented models. Disturbance models. Translation of analog design. State space design methods. Pole Placement design based on input output models. Optimal design methods: state space approach. Optimal design methods: input output approach. Identification. Adaptive control: Self turning control and model reference control. (*Prerequisite:* 501 or equivalent)

ELEC 561 (1½) MICROCOMPUTER ARCHITECTURE
This course will study the architecture of modern 32 bit microprocessor based computers and modern signal processors. Topics covered will include packaging, performance, instructions, coprocessors, memory management, bus systems and multiprocessing. (*Prerequisite:* CENG 445)

ELEC 562 (1½) MICROCOMPUTER INTERFACING
This course will study hardware and software interfacing of modern microcomputers. Topics covered will include bus protocols and standards, sensor and actuator interfacing, interface specifications, handlers and software principles, off the shelf interface chips and system integration. (*Prerequisite:* CENG 440 and 445)

ELEC 563 (1½) ADVANCED COMPUTER ARCHITECTURE
Advances in computer architecture. Topics covered will include central processor speed up; memory organization and management; microprogrammed based, bit sliced, RISC and stack architectures; software and hardware features of selected computer architectures; language based computers, fault tolerant systems, associative processors, data flow architecture, and database machines. (*Prerequisite:* CENG 450 or equivalent)

ELEC 564 (1½) NEURAL NETWORKS AND THEIR IMPLEMENTATION
Biological inspiration, historical background, learning in neural nets (backpropagation, hebian, etc.), single- and multi-layer networks associative memories, classification and clustering models, recurrent networks. Neural network technology, implementation software and hardware technologies, algorithm definitions, computational requirements, solution methods, parallel processing hardware. VLSI and optical implementations of neural networks. (*Prerequisites:* 465 and CENG 420 or permission of the instructor)

ELEC 571 (1½) UNDERWATER ACOUSTIC SYSTEMS
Propagation of acoustic plane waves in a homogeneous medium and its electrical equivalent model. Acoustic impedance. Pressure measurements and units. Acoustic transducers and equivalent circuits. Acoustic arrays, beam forming and beam steering. Sound transmission in the ocean. Ambient noise. Sonar equations. Performance analysis of active and passive sonar systems. Introduction to specialized acoustic systems. (*Prerequisites:* 300 and 260 or equivalent)

ELEC 581 (1½) POWER ELECTRONICS
Characteristics of power semiconductor switching devices, e.g., SCRs, bipolar and MOS power transistors, GTOs. Gate and base drive circuits. Protection of power semiconductors. Basic principles of phase controlled converters, dc to dc choppers, dc to ac inverters (square wave and pulse width modulated), switching power supplies, resonant converters. Applications to communication and computer power supplies, electric drives, induction heating, etc.

ELEC 590 (1½-3) DIRECTED STUDY
A wide range of topics will be available for assignments. Topics will be restricted to recent advances.

ELEC 598 (3) M.ENG. PROJECT (Grading: INP, COM, N or F)
ELEC 599 (12) M.A.SC. THESIS (Grading: INP, COM, N or F)

ELEC 611 (1½) DIGITAL COMMUNICATIONS BY SATELLITE
Model of communications satellite channel. Source coding for voice and video (PCM, ΔM). Digital modulation techniques (BPSK, QPSK, Offset QPSK, MSK, 8-ary PSK, CPFSK). Error control coding techniques in satellite communications. Multiple access techniques (FDMA, TDMA, CDMA). Demand assignment techniques. Packet satellite networks. On board switching and processing. (*Prerequisite:* 511, 512)

ELEC 612 (1½) RADIO COMMUNICATIONS
Review of existing radio communication systems, both voice and data. Radio channel characterization at HF and VHF/UHF. Effects of propagation, antennas and polarization. Random FM and click noise. Time varying dispersion. System design considerations: modulation techniques, diversity, error control. Co-channel and adjacent channel interference. Specialized systems: mobile satellite, cellular telephone, mobile data systems. (*Prerequisite:* 512 or equivalent)

*** ELEC 619A (1½) SELECTED TOPICS IN DIGITAL COMMUNICATIONS**

*** ELEC 619B (1½) SELECTED TOPICS IN COMPUTER COMMUNICATIONS**

*** ELEC 619C (1½) SELECTED TOPICS IN SECURE COMMUNICATIONS**

ELEC 621 (1½) NUMERICAL TECHNIQUES IN ELECTROMAGNETICS
Introduction to theoretical principles, and applications of numerical techniques for solving electromagnetic field problems. Static and dynamic field problems in modern microwave and millimeter wave transmission media. Maxwell's equations and their principal solutions. Boundary and interface conditions. Deterministic field problems. Finite difference and finite element method (FDM, FEM). Method of moments (MM). Dynamic field solutions for eigenvalue problems. Spectral domain and mode matching techniques. Transmission line method (TLM). The methods are applied to study microstrip transmission lines, as well

as eigenvalue and scattering problems in inhomogeneous waveguide structures. (*Prerequisite:* 521 or equivalent)

ELEC 622 (1½) NONLINEAR MICROWAVE COMPONENTS
Linearity and nonlinearity, frequency generation, representation of two-port networks, travelling wave and transmission-line concepts, scattering matrix and chain scattering matrix, Smith chart, impedance matching networks, signal flow graphs, characteristics of microwave bipolar junction and field-effect transistors, microwave transistor amplifiers, noise, broadband and high-power design methods, microwave oscillators, millimeter-wave amplifiers and oscillators, diode mixers, FET mixers, millimeter-wave mixers. (*Prerequisites:* 454 or 521 or equivalent)

*** ELEC 629 (1½) SELECTED TOPICS IN MICROWAVES, MILLIMETER WAVES AND OPTICAL ENGINEERING**

ELEC 631 (1½) DIGITAL FILTERS: II
Design of recursive and nonrecursive digital filters satisfying prescribed specifications. Transformations. Design of wave digital filters. Effects of quantization like roundoff noise and limit cycles. Minimization of noise and elimination of limit cycles. Fast Fourier transforms and their application for the implementation of digital filters. Digital filter applications. (*Prerequisite:* 531)

ELEC 632 (1½) ADAPTIVE FILTERS
Applications overview. Echo cancellation, noise cancellation, equalization, speech coding, and spectral estimation using Transversal and Lattice filters. Minimum mean square error, gradient algorithm, block and recursive least squares. (*Prerequisites:* 310, 400, 408 or equivalent)

ELEC 633 (1½) OPTIMAL ESTIMATION
Random variables review. Estimation methods; maximum likelihood, minimum mean squared error, maximum a posteriori, conditional mean, minimum variance, orthogonality principle. State space system models. Kalman Filtering Adaptive and nonlinear filtering. (*Prerequisite:* 504 or equivalent)

*** ELEC 639A (1½) SELECTED TOPICS IN DIGITAL SIGNAL PROCESSING**

*** ELEC 639B (1½) SELECTED TOPICS IN IMAGE PROCESSING**

ELEC 641 (1½) VLSI SYSTEM DESIGN
MOS design techniques. VLSI design methodology. Synchronous and self-timed systems. Structured design and testing strategies. Computer ALU design. Systolic arrays. Pipeline processing. Interconnection networks for parallel computers. VLSI system case studies: bit-slice CMOS microprocessor, matrix eigenvalue extraction, self-routing switching network, pixel-plane graphic engine, digital filters, and synthetic aperture radar (SAR) processing. (*Prerequisites:* 465 or 543 or equivalent)

*** ELEC 649A (1½) SELECTED TOPICS IN ELECTRONIC CIRCUITS**

*** ELEC 649B (1½) SELECTED TOPICS IN VLSI DESIGN**

***ELEC 651 (1½) CONTROL ASPECTS IN ROBOTICS**
Direct and inverse kinematics. Direct and inverse dynamics. Path planning. PID control and its robustness. Computer torque method. Resolved acceleration control. Differential geometric approach. Adaptive control as applied to manipulators. Hybrid force/position control. Robustness issues of various control algorithms. Computational considerations. (*Prerequisites:* 425 and 501 or equivalent)

*** ELEC 659A (1½) SELECTED TOPICS IN ROBOTICS**

*** ELEC 659B (1½) SELECTED TOPICS IN AUTOMATIC CONTROL**

ELEC 661 (1½) INTRODUCTION TO PARALLEL PROCESSING
Introduction to parallel systems. General formalism and description of parallel systems. The meaning of sequential and parallel execution. Liveness. Synchronization mechanisms. Principles of pipelining and vector processing. Examples of pipelined and vector supercomputers (e.g. Cray 1, 2, XMP, eta 10, Fujitsu VP-200, etc.). SIMD machines. Interconnection networks, applications. Examples of SIMD machines (e.g. ILLIAC, STARAN, the Connection machine, etc.), MIMD machines. Architecture alternatives (shared memory vs distributed systems) and applications. Multistage interconnection networks. Computer interconnection networks and routing (e.g. n-cube, hypercycles, e-cube routing, hyperswitch, etc.). Distributed operating systems (e.g. C.mmp and Hydra, Cm* and Medusa, etc.). Data-flow (macro and micro data-flow). Systolic arrays. (*Prerequisites:* CENG 450 or equivalent)

*** ELEC 669 (1½) SELECTED TOPICS IN COMPUTER ENGINEERING**

*** ELEC 679 (1½) SELECTED TOPICS IN UNDERWATER ACOUSTIC SYSTEMS**

*** ELEC 689 (1½) SELECTED TOPICS IN POWER ELECTRONICS**

ELEC 699 (30) PH.D. DISSERTATION

* These are variable content courses. Students will be permitted to take them more than once for credit to a maximum of three units, provided the course content is different from that taken previously.

(Grading: INP, COM, N or F)

ENGLISH

The Department of English offers the M.A. and Ph.D. degrees in English, Canadian, American, and Commonwealth Literature. All candidates for these degrees must meet all the general requirements of the University of Victoria Faculty of Graduate Studies as well as the specific requirements of the Department of English. A minimum TOEFL score of at least 630 is required of all foreign students whose first language is not English.

A departmental guide, *A Handbook for Graduate Students,* is available on request.

Master of Arts

1. Requirements for Admission: At least a high second class standing (normally a B+ average) (6.00 GP.A.) in the final two years of undergraduate work.
2. Period of residence: With a good Honours B.A. or a strong major in English, a full time student could finish the M.A. within one calendar year. A part time student, or one who is required to make up course work at the undergraduate level, would normally need at least two years for completion of the degree.
3. Language Requirement: Reading knowledge of one appropriate language other than English.
4. The Department offers two programs of equal status, leading to the M.A. degree:

A. Thesis option

(a) 5 courses (1½ units each), one of which is English 500	= 7½ units
(b) thesis (7½ units)	= 7½ units
	15 units

B. Nonthesis option

(a) 8 courses (1½ units each)	= 12 units
(b) Comprehensive examination (English 598, 3 units)	= 3 units
	15 units

5. The course of study for each individual M.A. candidate will be determined by the Director of English Graduate Studies in consultation with the student and his Supervisory Committee. Transfer is possible from one program to the other, except in cases where a student has been asked to withdraw.

Doctor of Philosophy

1. Requirement for Admission: Generally an M.A. degree, with a minimum average of A- in graduate courses. It may be possible for a student in our M.A. program to enter the Ph.D. program before

completing the M.A., but not before the completion of one Winter Session and five graduate courses.

2. Residence Requirement: "A student proceeding to the degree of Doctor of Philosophy must register at the University of Victoria and pursue studies under the direction of a faculty member as a full time student for at least two Winter Sessions, except that a student entering the Doctoral program with a Master's degree may have this residence requirement reduced to one Winter Session." (5.3, page 234)

3. Course Requirements: Six one term graduate courses beyond those taken as part of an M.A. program. One of these courses will be English 500, unless a student has already taken it or its equivalent. Students may be required to take courses in areas where they are deficient.

4. Language Requirement: Reading knowledge of two appropriate languages other than English.

5. Examinations: Within two years of registration as a doctoral candidate and at least six months before completion of the degree, a student must pass a "candidacy examination" (5.6, page 234). This examination will be set by the student's Supervisory Committee in consultation with other members of the department who have specialized knowledge of the general field within which the student's proposed thesis topic is located. The English Graduate Committee must approve both the general field, which will be defined by the Supervisory Committee, and also the examination based on it. The examination will consist of at least one sitting of three hours and it may, at the discretion of the Supervisory Committee, be followed by an oral examination.

6. Unit values:

6 courses	9 units
Examination in student's general field	—
Thesis	28½ units
	37½ units

Faculty and Areas of Interest

Elizabeth Archibald, Ph.D. (Yale)	Medieval and renaissance literature
Edward I. Berry, Ph.D. (Calif., Berkeley)	Shakespeare; Sidney; renaissance literature
Michael R. Best, Ph.D. (Adelaide)	Renaissance drama and Shakespeare; Elizabethan popular culture
G. Kim Blank, Ph.D. (Southampton)	Romantic poetry; critical theory; popular fiction; canonization
Thomas R. Cleary, Ph.D. (Princeton)	Restoration and 18th century literature; 19th century American literature
Evelyn M. Cobley, Ph.D. (British Columbia)	Literary theory; comparative literature; 20th century British and American fiction
Misao A. Dean, Ph.D. (Queen's)	Canadian novel, especially before World War I; writing by women, especially 1880-1920
Charles Doyle, Ph.D. (Auckland)	Modern poetry and poetics; modernism; Pound; Williams; Stevens
Anthony S.G. Edwards, Ph.D. (London)	Medieval and early renaissance literature; bibliography and textual criticism
Diane Edwards, Ph.D. (Princeton)	Biblical and modern literature; Anglo-Irish literature
Anthony B. England, Ph.D. (Yale)	Early 18th and early 19th century British literature
Mel D. Faber, Ph.D. (Calif., Los Angeles)	Literature and psychology; psychoanalysis; the drama; Shakespeare
Gordon Fulton, Ph.D. (London)	Restoration and 18th century literature; literary stylistics; history of the English language
Bryan N.S. Gooch, Ph.D. (London)	17th and 18th century British literature; relationship between poetry and music; musical settings of British literature, including Shakespeare; Canadian literature
Patrick Grant, D.Phil. (Sussex)	Renaissance and modern literature
John G. Hayman, Ph.D. (Northwestern)	Victorian literature
Anthony W. Jenkins, Ph.D. (Calif., Berkeley)	Medieval literature; renaissance, 19th and 20th century drama; the British novel
Smaro Kamboureli, Ph.D. (Manitoba)	Canadian literature, especially the contemporary long poem; critical and feminist theory; genre theory; multiculturalism
Arnold Keller, Ph.D. (Concordia)	Writing instruction; computer applications to the teaching of English; curriculum studies
Kathryn Kerby-Fulton, D.Phil. (York, England)	Middle English literature; Medieval Latin religious writings, especially apocalyptic and visionary works; allegorical literature; autobiographical literature
Patricia Köster, Ph.D. (London)	Restoration and 18th century literature
Margot K. Louis, Ph.D. (Toronto)	19th century poetry: Barrett Browning, Dickinson, Swinburne and the pre-Raphaelites
Judith I. Mitchell, Ph.D. (Alberta)	Late 19th and early 20th century literature; composition and technical writing; feminist criticism
Toby A. Myrthen, Ph.D. (Dalhousie)	Critical theory; history of criticism; modern British literature
Victor A. Neufeldt, Ph.D. (Illinois)	19th century British literature; composition
Colin J. Partridge, Ph.D. (Nottingham)	American literature; Commonwealth literature; film studies
Beryl Rowland, Ph.D. (British Columbia), D.Litt. (Mount St. Vincent)	Medieval literature
Robert M. Schuler, Ph.D. (Colorado)	Renaissance literature; relations between literature and science; bibliography; textual criticism
Stephen A.C. Scobie, Ph.D. (British Columbia)	Canadian literature; modern poetry; Scottish literature; literature and the other arts, especially film and painting; critical theory (Derrida, deconstruction)
Terry G. Sherwood, Ph.D. (Calif., Berkeley)	Renaissance literature
Herbert F. Smith, Ph.D. (Rutgers)	19th century American literature; structuralism; post-structuralism; post-modern fiction
Nelson C. Smith, Ph.D. (Washington)	The novel; 19th century British fiction; American and Canadian literature
Henry E. Summerfield, M. Litt. (Durham)	18th and 20th century British literature
Reginald C. Terry, Ph.D. (London)	19th century British literature; modern drama
David S. Thatcher, Ph.D. (Alberta)	20th century literature; Shakespeare

John J. Tucker, Ph.D. (Toronto)	Linguistics and critical theory; modern and medieval poetry
Trevor L. Williams, Ph.D. (Wales)	James Joyce; modern British literature; marxist literary theory; popular culture; literature of war

GRADUATE COURSES AND SEMINARS

Not all the following courses will be offered in a particular year. Students should consult the Department to determine the courses which will be offered this year.

All courses except 502 are variable content.

Under certain circumstances it will be possible to include one of the "Studies" courses (505-586) twice in a student's program of studies.

ENGL 500 (1½) INTRODUCTION TO BIBLIOGRAPHY AND METHODS OF RESEARCH
This course seeks to introduce students to techniques of scholarly study and practice. The course will include introductions to bibliographical tools and terminology, to principles of editing and to various aspects of scholarly procedure: the use of manuscript materials, appropriate forms of citation and documentation, and the preparation of materials for publication.

Note: This course is compulsory for all graduate students, except those who can show equivalent previous credit.
P.J. Köster F(3-0)

ENGL 503 (1½) SPECIAL STUDIES: I
(This course will be offered subject to the approval of the Department.) (3-0)

ENGL 504 (1½) SPECIAL STUDIES: II (3-0)

ENGL 505 (1½) STUDIES IN LITERARY THEORY: I
This Year: The Hegelian Legacy in Modern Critical Theory
As the most important modern thinker, Hegel conditions the perception of philosophy and literature in the post-romantic era. Hegel and his 19th-century opponents — especially Marx, Kierkegaard, and Nietzsche — provide impetus both for the "theoretical edge" of modernist literature and art and for the emergence of modern critical theory as a vital discourse in modern culture. An appreciation of Hegelianism and post-Hegelianism is crucial to a grasp of central preoccupations of literature and literary theory in modernity — and in emergent postmodernity.
T.A. Myrthen F(3-0)

ENGL 506 (1½) STUDIES IN LITERARY THEORY: II
This Year: Literature and Ideology: Theoretical Investigations
The course will encourage students to reflect critically on the relationship between literature and ideology (or text and world) in order to identify and discuss its problematical nature. The focus will be on the ways literary texts claim to represent reality as it is or should be. We will submit such claims to critical scrutiny and analyze the ideological presuppositions they imply. Although the emphasis will be on theoretical issues, we will frequently refer to literary texts.
E.M. Cobley S(3-0)

ENGL 510 (1½) STUDIES IN OLD ENGLISH LITERATURE: I (3-0)

ENGL 511 (1½) STUDIES IN OLD ENGLISH LITERATURE: II (3-0)

ENGL 515 (1½) STUDIES IN MIDDLE ENGLISH LITERATURE: I
This Year: Medieval Romance
Romance is one of the most characteristic medieval genres, and many of its themes and conventions were used, albeit in different forms, in later centuries (Shakespeare's late plays, Spenser, the novel). In this course we shall look at a wide range of Arthurian and non-Arthurian romances; we shall consider significant themes such as chivalry, "courtly love," family separation and reunion, and the quest for identity, and assess the legacy of medieval romance to later literature. We shall also wrestle with the problem of definitions of romance.
E.F. Archibald F(3-0)

ENGL 516 (1½) STUDIES IN MIDDLE ENGLISH LITERATURE: II (3-0)

ENGL 520 (1½) STUDIES IN RENAISSANCE LITERATURE: I
This Year: Music for Shakespeare
The impact of music upon the dramas, including a consideration of specific requirements for music within the plays and of the effect of differing musical treatments upon the texts, with particular attention to *As You Like It, Twelfth Night, The Tempest, A Midsummer Night's Dream,* and *Othello.* Attention will also be given to the importance of music in Shakespeare's society and, as appropriate, to its use by other dramatists of the period. A technical knowledge of music and a background in music history are not required.
B.N. Gooch S(3-0)

ENGL 521 (1½) STUDIES IN RENAISSANCE LITERATURE: II (3-0)

ENGL 530 (1½) STUDIES IN THE LITERATURE OF THE 17TH CENTURY: I (3-0)

ENGL 531 (1½) STUDIES IN THE LITERATURE OF THE 17TH CENTURY: II (3-0)

ENGL 540 (1½) STUDIES IN THE LITERATURE OF THE 18TH CENTURY: I
This Year: Swift, Pope, Gay and The Scriblerus Club: Collaboration and Creativity in the Great Age of English Satire
The course will examine the rich and various satiric writings of the writers who dominated the famed Scriblerus Club during the late reign of Queen Anne: Jonathan Swift, Alexander Pope, John Gay and John Arbuthnot. The primary emphasis of the course will be upon the analysis of subtle and complex satiric texts in suitably enriched historico-topical and aesthetic contexts.
T.R. Cleary S(3-0)

ENGL 541 (1½) STUDIES IN THE LITERATURE OF THE 18TH CENTURY: II (3-0)

ENGL 550 (1½) STUDIES IN THE LITERATURE OF THE 19TH CENTURY: I
This Year: Studies in the Poetry of William Wordsworth
Wordsworth's poetry appears to solve problems of morality, memory and experience by fashioning a powerful rhetoric of reconciliation and restoration. This course will study in detail Wordsworth's style of poetic problems, and will examine these powerful yet failed rhetorical gestures which, in Wordsworth's words, lead to "abundant recompence."
G.K. Blank F(3-0)

ENGL 551 (1½) STUDIES IN THE LITERATURE OF THE 19TH CENTURY: II (3-0)

ENGL 560 (1½) STUDIES IN THE LITERATURE OF THE 20TH CENTURY: I (3-0)

ENGL 561 (1½) STUDIES IN THE LITERATURE OF THE 20TH CENTURY: II (3-0)

ENGL 570 (1½) STUDIES IN AMERICAN LITERATURE: I
This Year: Studies in Henry James' Fiction
This course offers the opportunity for reading in depth the major works of Henry James, an artist who devoted himself to advancing the techniques of fiction in order to dramatize more fully his characters' human autonomy, states of consciousness, and the ethical consequences of their choices. Whatever story he is telling, his real subject is freedom, and — for him — the greatest sin is improper intervention in the lives of others.
C.V. Johnson F(3-0)

ENGL 571 (1½) STUDIES IN AMERICAN LITERATURE: II
This Year: Three American Poets: Whitman, Dickinson, and Frost
The aim of this course is to explore the poetry of the two greatest 19th century American poets, one in the open tradition and the other in the Puritan tradition. Following them, Robert Frost established in poetry the centrality of American themes and American consciousness.
C. Doyle S(3-0)

ENGL 580 (1½) STUDIES IN COMMONWEALTH LITERATURE: I
This Year: Studies in Major Novels by V.S. Naipaul, Patrick White and Margaret Laurence: Local Habitations and Exploratory Journeys
The course studies a deeply-felt characteristic of twentieth-century life — the tension between familiar realities and exploratory journeys as quests for alternative values.
C.J. Partridge F(3-0)

ENGL 581 (1½) STUDIES IN COMMONWEALTH LITERATURE: II (3-0)

ENGL 585 (1½) STUDIES IN CANADIAN LITERATURE: I
This Year: Postcolonialism and Multiculturalism: Ethnic Discourse in Canadian Literature
Against the historical and ideological background of postcolonialism and multiculturalism, this course will examine early and contemporary "ethnic" and "immigrant" writing in Canada. Special attention will be given to the Canadian literary canon, and to the concepts of subject and discourse.
S. Kamboureli S(3-0)

ENGL 586 (1½) STUDIES IN CANADIAN LITERATURE: II (3-0)
ENGL 590 (1½) DIRECTED READING: I (3-0)
ENGL 591 (1½) DIRECTED READING: II (3-0)
ENGL 598 (3) COMPREHENSIVE EXAMINATION (Grading: INP, COM, N or F)
ENGL 599 (7½) M.A. THESIS (Grading: INP, COM, N or F)
ENGL 699 (Credit to be determined) Ph.D. DISSERTATION (Grading: INP, COM, N or F)

FRENCH LANGUAGE AND LITERATURE

(Not offered 1991-92)

The Department of French Language and Literature will consider applications for the M.A. program in French from
(a) students having graduated with a B.A. (Major) in French;
(b) students with equivalent qualifications.

The B.A. (Major) in French consists of a minimum of fifteen units of senior undergraduate course work in French, three of which are represented by 302 (advanced grammar and composition, introduction to stylistics) or its equivalent. Students who have not included 402 (advanced language course in modern French usage) or its equivalent in their Major must take this course in addition to the nine units of course work stipulated in (b) below. In general, students who wish to be admitted to the M.A. program will have obtained a minimum grade point average of 6.50 in the French courses numbered 302 and above, which formed the Major.

The M.A. program shall consist of a minimum of fifteen units of graduate credit:
(a) a thesis in French of approximately twenty-five thousand words, worth six units of credit;
(b) nine units of course work, three of which may be drawn from courses in French offered at the senior undergraduate level.

The thesis topic selected by the candidate must have the approval of both the supervisory committee and the M.A. committee of the French Department. This regulation also applies to any substantial change from the approved topic which the candidate may wish to make in the course of the candidate's research.

Candidates are required to possess a reading knowledge of English. In addition, candidates must satisfy the Department that they have a working knowledge of another approved language, in addition to French and English.

Faculty and Areas of Interest

Barrington F. Beardsmore, Ph.D. (British Columbia)	Medieval studies and history of the language
Claire Carlin, Ph.D. (Calif., Santa Barbara)	17th century literature
John C.E. Greene, D. de l'Univ. (Grenoble)	19th century French literature
Emmanuel Hérique, D. de IIIe cycle (Nancy)	French linguistics: phonetics, sylistics
Yvonne Y. Hsieh, Ph.D. (Stanford)	20th century poetry, 19th and 20th century literature, East-West literary relationships
Marc Lapprand, Ph.D. (Toronto)	Literary theory, stylistics, 20th century literature
Elaine Limbrick, D. de IIIe cycle (Poitiers)	Montaigne; 16th century French literature and history of ideas
Mary Ellen Ross, Ph.D. (Toronto)	18th century literature, Canadian literature
Danielle Thaler, Ph.D. (Toronto)	19th century literature, children's literature, creative writing, translation, oral French
Marie Vautier, Ph.D. (Toronto)	20th century novels and theatre, women writers
Jennifer R. Waelti-Walters, Ph.D. (London)	Butor, Le Clézio, 20th century novel and women's writing

GRADUATE COURSES

(Not offered 1991-92)

NOTE: A selection of these courses will be given depending upon the availability of members of faculty. Students should consult the Graduate Adviser before making choices. In addition students should read carefully the entry under Faculty of Graduate Studies, French.

FREN 501 (1½) FRENCH LITERARY CRITICISM SINCE SAINTE-BEUVE
FREN 506 (1½) PASCAL IN HIS TIME
FREN 514 (1½ or 3) BAUDELAIRE IN HIS TIME
FREN 516 (1½ or 3) ***LE NOUVEAU ROMAN*** **IN FRANCE**
FREN 517 (1½ or 3) MARCEL PROUST ***A LA RECHERCHE DU TEMPS PERDU***
FREN 518 (1½ or 3) LIFE AND WORKS OF ROMAIN ROLLAND
FREN 521 (1½ or 3) MONTAIGNE'S ***ESSAIS*** **AND THEIR LITERARY AND PHILOSOPHICAL INFLUENCE**
FREN 540 (1½ or 3) STUDIES IN MEDIEVAL LITERATURE
FREN 562 (1½ or 3) EXISTENTIALISM IN LITERATURE
FREN 565 (1½ or 3) SOCIAL ROMANTICISM 1830-1848
FREN 590 (1½ or 3) DIRECTED STUDIES
FREN 599 (6) THESIS (Grading: INP, Com, N or F)

GEOGRAPHY

The Department of Geography offers courses of study and research leading to M.A., M.Sc. and Ph.D. degrees. Admission to the Departmental graduate program is normally granted only to those students having honours or major degrees with first or second class standing in geography (at least a B+ average: — 6.00 G.P.A.). Students from the British Isles, for example, are expected to have obtained at least an upper second class honours degree. A promising student lacking such qualifications may be allowed to make up this deficiency, being required to register as an unclassified student.

Program of Study

The graduate program requires attendance at formal courses and the presentation and defence of a thesis or dissertation. A minimum of 9 units of course work is required for the M.A. and M.Sc. degrees, and an additional 7½ for the Ph.D. The Master's thesis is worth 10 units, giving a total of 19 for the Master's degree; the Ph.D. dissertation is worth 24 units, giving a total of 31½ for the Ph.D.

All graduate students are required to take GEOG 500 and 522. M.A. students are required to take GEOG 523. M.Sc. students are required to take GEOG 524 and 525. All students must have completed an acceptable course on statistical analysis or be required to take GEOG 321 as an additional course. Students may take only one GEOG 590 course (directed readings) as part of the the course requirements. A student normally should expect to spend two years of academic work to obtain a Master's degree. Doctoral candidates are normally required to spend two years in attendance and should complete the program in three years. If a student has successfully completed a core course topic as part of an earlier degree requirement, that course should be replaced by another of equal unit value, the choice being made in consultation with the supervisory committee and approved by the Graduate Adviser.

Inquiries concerning the graduate program may be addressed to the Graduate Studies Adviser, Department of Geography. Application forms for admission, which include the indication of need for financial assistance can be obtained directly from the Faculty of Graduate Studies. The attention of students is drawn to the departmental closing date for applications, March 31. Completed applications and supporting documents must be available for consideration by the Department on, or prior to, that date.

Coop Program

The Cooperative education program extends the regular program with work term(s) in government or industry. Research undertaken during the work term is intended to relate to the student's research interest area. The work periods are jointly supervised by the employer and the Department of Geography and treated as part of the student's program.

Faculty and Research Interests

Philip Dearden, Ph.D. (Victoria)	Resources: protected areas, conservation, tourism, Thailand
Michael C.R. Edgell, Ph.D. (Birmingham)	Physical: biogeography, forest resources, wildlife management
Mark Flaherty, Ph.D. (McMaster)	Resources: economic land evaluation, quantitative, Thailand
Charles N. Forward, Ph.D. (Clark)	Urban: port functions, urban historical, Canada
Harold D. Foster, Ph.D. (London)	Physical: applied geomorphology, hydrology, natural hazards, medical geography
C. Peter Keller, Ph.D. (Western Ontario)	Cartography GIS, computer cartography, spatial analysis, tourism and northern development
David C.-Y. Lai, Ph.D. (London)	Cultural: multiculturalism, overseas Chinese, Chinatowns, China
Stephen C. Lonergan, Ph.D. (Pennsylvania)	Resources: energy, impact assessment, climate warming, China
Peter E. Murphy, Ph.D. (Ohio State)	Urban: community planning, tourist management, marketing
K. Olaf Niemann, Ph.D. (Alberta)	Physical: geomorphology, hydrology, remote sensing, digital terrain modelling
J. Douglas Porteous, Ph.D. (Hull)	Environmental Aesthetics: literary landscapes, urban planning, Latin America
Stanton E. Tuller, Ph.D. (Calif., Los Angeles)	Physical: climatology, heat balance, Japan
Eileen Van der Flier-Keller, Ph.D. (Western Ontario)	Physical/Geology, geochemistry, sedimentology, coal resources
Colin J.B. Wood, Ph.D. (McMaster)	Economic: cultural

GRADUATE COURSES

All courses may not be offered in any one year.

GEOG 500 (1½) COLLOQUIUM AND FIELD WORK IN GEOGRAPHY

A seminar course based on presentations by a broad variety of guest speakers on topics of current interest to Geographers. Also includes a compulsory field camp, usually organized for the week before classes commence in the fall term. Students must enroll for 2 terms. (Required core course) Y

GEOG 522 (1½) RESEARCH DESIGN IN GEOGRAPHY

This course introduces students to the purpose and practice of scholarly enquiry. It reviews a wide range of methodologies from phenomenology to systems analysis and the kinds of opportunities and challenges presented by each. Links are made between the historical roots of these approaches and current practice in geography. (Required core course)
S. Lonergan F

GEOG 523 (1½) RESEARCH METHODS: HUMAN GEOGRAPHY

This course is a critical introduction to several research methods used in human geography. The strengths, weaknesses, and limitations of their use will be emphasized. Topics include sampling procedures; survey research; case study analysis; interpretative methods; observational methods; archival/documenting research; quasi-experiments. (Required core course for M.A. students)
C. Wood S

GEOG 524 (1½) MATHEMATICAL ANALYSES OF SPATIAL SYSTEMS

The emphasis is placed upon application of various statistical techniques to geographical problems rather than upon the mathematical bases of such techniques.

GEOG 525 (1½) RESEARCH METHODS: PHYSICAL GEOGRAPHY

This course is intended to introduce the student to research techniques in physical geography. The course will consist of a series of lectures, seminars, and field trips and will culminate in the student preparing a detailed research design. The course will be taught by various faculty members and guest lecturers.

GEOG 526 (1½) THE NATURE AND PHILOSOPHY OF GEOGRAPHY

The history of geography up to the 20th century will be examined, but the bulk of the course is concerned with the radical changes in geographical philosophies, methodologies, and approaches which have occurred since 1950. The nature of geography will be considered in relation to other disciplines and interdisciplines. Recommended for graduates who wish to place their specific research goals in the general context of the geographical research frontier.

GEOG 528 (1½) SEMINAR IN GEOGRAPHICAL INFORMATION SYSTEMS

This course focuses on contemporary issues in the design and advancement of geographical information systems. Current research problems are identified and discussed in relation to cartography, spatial analysis and resource management. Students will use the Department's GIS facilities. Each student will prepare and present to the class a research paper.
P. Keller S

GEOG 552 (1½) SEMINAR IN RESOURCES MANAGEMENT PROBLEMS

A seminar dealing with various problems encountered in resources management, including the collection and analysis of data, the organization of research, the formulation of plans and programs, and the analysis of economic and social aspects of resource development projects. Examples will be drawn from Canada and elsewhere. Seminars will be led by resource geography faculty.
S. Lonergan F

GEOG 553 (1½) RECREATION POLICY AND RESEARCH

A course dealing with the formulation and implementation of recreation policy, and the identification of significant areas for research. Conducted as a seminar, it will include presentations from the instructors

and outside speakers as well as students. Each student will be responsible for preparing a detailed proposal for a research topic.

GEOG 554 (1½) ADVANCED TOPICS IN PARKS AND WILDERNESS MANAGEMENT
The objective of this course is to pursue in depth critical and current management issues in parks and wilderness areas. Based on sound theoretical and conceptual constructs the course will entail investigation of the specific case studies. Organized largely as a seminar, the precise format will be determined by mutual agreement of class and instructor. A research paper will be required.

GEOG 555 (1½) PROBLEMS IN THE MANAGEMENT OF COASTAL AND MARINE RESOURCES
A seminar on the problems of coastal and marine resources with special reference to Canada. Topics to be investigated may include coastal resource conflicts, fishery resources.

GEOG 556 (1½) SEMINAR IN ENVIRONMENTAL IMPACT ASSESSMENT
A review of the philosophy, process and methods of environmental impact assessment. It will include specific discussions of the origins, approaches, techniques of measurement, and the political process of assessment. Economic, social, and various physical and environmental parameters will be taken into account. The course will conclude with the application of the various techniques to an actual case study. One or more field trips will be undertaken. It is probable that the course will be conducted as a joint enterprise with the Department of Biology.

GEOG 557 (1½) FOREST RESOURCE MANAGEMENT: PROBLEMS AND POTENTIAL
A seminar based on both student and guest speaker presentations together with field excursions that selectively examine ecological, social and economic factors related to the management of forest resources in British Columbia. Each student will prepare one major paper for critical discussion.

GEOG 560 (1½) SEMINAR IN HUMAN GEOGRAPHY
An examination of contemporary theoretical issues and competing research paradigms in human geography. Seminar theme will vary depending on faculty interests.

GEOG 561 (1½) SEMINAR IN TOURISM RESEARCH
The course examines specific research areas in tourism where Geography can and is making a contribution to a better understanding of this phenomenon. A specific theme will be selected each year, the choice including marketing research, destination area development, environmental impacts. Students are expected to participate in the seminars and develop a research paper on one aspect of the selected theme of that year.

GEOG 571 (1½) SEMINAR IN PHYSICAL GEOGRAPHY
The course will cover selected topics in physical geography and earth science such as biogeography, climatology, hydrology, geomorphology, sedimentology, soil science and remote sensing applications. Course content will vary annually depending on graduate and faculty research interests. Seminars, faculty and guest lectures, and individual research projects will be utilized.

GEOG 590 (A-Z) (1½) DIRECTED STUDIES IN GEOGRAPHY
M.A. and M.Sc. (Special Arrangement) students may only take one 590 course as part of their minimum program requirements. If they wish to take additional 590 courses these can be added to their minimum course load. Individual titles will be assigned to each numbered section of the course arranged by supervisory committees.

GEOG 599 (credit to be determined, normally 15 units) M.A. THESIS (Grading: INP, Com, N or F)

GEOG 699 (credit to be determined, normally 24 units) PH.D. DISSERTATION (Grading: INP, Com, N or F)

GERMANIC STUDIES

The Department of Germanic Studies offers a program of studies leading to the degree of Master of Arts.

All candidates for the degree must meet all the general requirements of the Faculty of Graduate Studies, as well as the specific requirements of the Department of Germanic Studies. Admission to the program normally requires a Bachelor's Degree (Major in German) with a minimum overall average of B+ (6.00 G.P.A.), or a Bachelor's Degree (Major in German) with a minimum average of A- (7.00 G.P.A.) in the final year's work.

The M.A. Program in Germanic Studies shall consist of a minimum of fifteen (15) units of graduate credit:

(a.) at least nine units of course work, three of which may be drawn from courses in German at the senior undergraduate level, and

(b.) a thesis, worth six units of credit (in exceptional circumstances, a candidate may be allowed to write a thesis of nine unit value); there will be a final oral examination of the thesis.

Candidates are required to possess a reading knowledge of English, and must satisfy the Department that they have a working knowledge of a language other than German and English.

Faculty and Areas of Interest

Angelika F. Arend, D.Phil. (Oxford)	Lyric poetry, early 19th century literature, contemporary aesthetics
Michael Hadley, Ph.D. (Queens)	18th century literature, enlightenment, naval history
Peter G. Liddell, Ph.D. (Brit. Col.)	Curriculum studies, G.D.R. literature: theory and prose, history of German language, Germans in B.C.
Johannes Maczewski, Ph.D. (McGill)	Drama and theatre, 18th and early 19th century literature, G.D.R. literature
Walter E. Riedel, Ph.D. (McGill)	20th century literature, German-Canadian literature, literary relations: Germany and Canada
Rodney T.K. Symington, Ph.D. (McGill)	Modern literature, Brecht, Doderer, literature in translation, German-Canadian literature

GRADUATE COURSES AND SEMINARS

NOTE: A selection of the following courses will be offered. Students should consult the Department concerning specific content of the courses offered in any given year.

GER 501 (1½) INTRODUCTION TO BIBLIOGRAPHY, METHODS OF RESEARCH, AND THEORY OF LITERARY CRITICISM

GER 510 (1½) STUDIES IN MEDIEVAL LITERATURE

GER 520 (1½) STUDIES IN 17th CENTURY LITERATURE

GER 530 (1½) STUDIES IN 18th CENTURY LITERATURE

GER 540 (1½) STUDIES IN 19th CENTURY LITERATURE

GER 550 (1½) STUDIES IN 20th CENTURY LITERATURE: I
This Year: The Search for New Beginnings in German Expressionism
W. Reidel F

GER 551 (1½) STUDIES IN 20th CENTURY LITERATURE: II
This Year: German Literature during the Eighties
J. Maczewski S

GER 560 (1½) GERMAN-CANADIAN STUDIES

GER 590 (1½) DIRECTED STUDIES: I
This year: German Women Authors — Modes of Writing and Subversion
A. Arend F

GER 591 (1½ or 3) DIRECTED STUDIES: II
This Year: Advanced Stylistics and Translation
M. Hadley/J. Maczewski F
Soldiering and War in German Literature
M. Hadley S

GER 599 (6-9) THESIS (Grading: INP, COM, N, or F)

HISTORY

Doctor of Philosophy:

1) Requirement for Admission: normally a Master's degree with a minimum average of A- in graduate courses.

2) Residence Requirement: "A student proceeding to the degree of Doctor of Philosophy must register at the University of Victoria and pursue studies under the direction of a faculty member as a full time student for at least two Winter Sessions, except that a student entering the Doctoral program with a Master's degree may have this residence requirement reduced to one Winter Session." (5.3, page 234)

3) The Ph.D. programme will normally require one year of course work beyond the Master's Degree and reading for three comprehensive fields. The fields will be examined by a combination of written and oral evaluations.

4) Theses may be written in Canadian history with emphasis on the west, north, British Columbia, native peoples, military and business history; in British history with an emphasis on political, social and cultural themes; other areas, including western European history, will be considered on an individual basis. A wide range of geographic and thematic secondary fields are available.

5) Course Requirements: the equivalent of nine units of graduate courses. One and a half units of these courses will be History 500 unless a student has already taken it or its equivalent.
Each student will take two three-unit Field Courses. The Field Courses are designed to cover major historiographical issues over a broad chronological period, within the various geographical areas: Canadian, British, American, European and Asian. In one of the Field Courses, normally the one covering the area of major geographical interest, a twenty-five to thirty page paper based on primary research will be required. The second course will be a reading Field in the area of the student's second area of interest. An historiographic paper of twenty to twenty-five pages will be required, although with the instructor's permission a student may opt to write a paper based on primary sources. Both Field Courses help prepare students for the field examinations.
Each student will also take a one and a half unit Topical Field course examining secondary literature on a significant theme such as social, military, intellectual/cultural, women's, native, world, maritime or business history. The course will cover various geographical areas and chronological periods and will relate to the student's third area, that is, the particular theme to be pursued in teh Ph.D. thesis. In appropriate cases students may take a Topical Field through a directed studies programme under the supervision of faculty outside the discipline of history.

6) The Field Courses will help prepare students for the comprehensive written and oral examinations. Field coverage will be broader than the course work and will be determined by the student and his/her advisors.

7) Before proceeding to the field examinations the student must pass all course work with at least a B+ average. A student may repeat field examinations one time only.

8) There will be a reading examination to determine the students' proficiency in a second language normally relevant to the student's research interest. A student may not present a thesis for oral defence before passing the language requirement.

9) In certain cases, requirements in addition to those already mentioned may be called for. The student and the student's supervisory committee will work out these requirements.

10) **Unit Values:**

HISTORY 500	1½
FIELD COURSE	3
FIELD COURSE	3
TOPICAL FIELD COURSE	1½
THESIS	30
TOTAL	39

Master of Arts:

The Department of History offers two programs leading to the M.A. degree: (1) thesis option, and (2) nonthesis option. Subject to the admission requirements of the Faculty of Graduate Studies, admission to either program normally requires a Bachelor's degree with a minimum overall average of B+ (6.00 G.P.A.), or a Bachelor's degree with a minimum average of A- (7.00 G.P.A.) in the final year's work. A candidate with background deficiencies in history may be required to register for a year as a non-degree undergraduate student before being admitted to the M.A. programme.

A. Thesis Option:

A student electing the thesis option will write a thesis of between 22,000 and 30,000 words (90-120 pages), and must successfully defend this thesis in an oral examination. The student will also complete a full year Field Course and History 500 (half year).

Facilities are available for thesis work in Canadian history (particularly British Columbia, Western Canadian and Canadian business and Canadian military history), and limited topics in other areas, such as intellectual, diplomatic, British, European and Western American history. The University's McPherson Library has holdings in excess of one million volumes, and graduate students may also be granted access to the Provincial Library and Archives, which include notable manuscript collections relating to western Canada and the northwestern United States.

Unit Values:

HISTORY 500	1½
FIELD COURSE	3
THESIS	10½
TOTAL	15

B. Non-thesis Option:

A student choosing the non-thesis option will select either two full-year Field Courses focussing on historiographical issues covering a broad chronological period within the area of various geographical histories, or one full-year Field Course and two half-year Topical Field Courses. The Topical Field Course will focus on such themes as social, military, intellectual/cultural, women's, native, world or business history examining how historians have approached that theme in different countries and different times. An Extended Research Paper, emerging from a Field Course and based on some primary source material will be completed during intersession and summer. The paper will be 8,500 to 12,000 words. An oral examination covering all course work and the extended research paper will normally be held in August/September.

Part-time students may prepare one full-year course per year, but are reminded that they will be examined in all courses in the final oral examination.

After all other requirements for the degree have been met, the student's competence in all courses will be examined by the Oral Examination Committee. The student's course supervisors, plus a member of the Graduate Faculty from outside the Department will comprise the student's Oral Examination Committee. The outside member will be provided with a copy of the required bibliographies from all courses as well as a clear — i.e., neither marked nor graded — copy of the Extended Research Paper (E.R.P.).

Unit Values:

(1)		(2)	
HISTORY 500	(1½)	HISTORY 500	(1½)
FIELD COURSE	(3)	FIELD COURSE	(3)
FIELD COURSE	(3)	TOPICAL FIELD COURSES	(3)
E.R.P.	(4½)	E.R.P.	(4½)
HISTORY 597	(3)	HISTORY 597	(3)
TOTAL	15 units		15 units

General:

All candidates for the M.A. degree must demonstrate a reading knowledge of a second language acceptable to the Department in order to qualify for graduation. The level of proficiency expected will be equivalent to a B or better in the reading courses (such as German 390 or equivalent) offered by the respective language departments. Examinations will normally be of two hours duration and may be written with the aid of a dictionary. They will normally be administered three times a year — in September or October, March and July. New students are strongly urged to take their language examination in the fall, an examination usually scheduled for the first week of the term in order that, if necessary, students may enroll in a language course. Should a student fail a language examination, the Department may require that the student take formal language instruction before writing another examination.

NOTE: students will not be permitted to sit their oral examinations until they have satisfied this language requirement.

Students who obtain a 5.00 grade point average but who obtain less than B standing in History 500 must repeat History 500. They may repeat History 500 once only.

Part-time study is permitted, but the degree must be completed within five years of the initial registration.

Although there are no formal residence requirements, residence is recommended.

Faculty and Major Fields of Interest

Robert S. Alexander, Ph.D. (Cambridge)	Early Modern and Modern France.
Peter A. Baskerville, Ph.D. (Queen's)	Business history; pre-Confederation Canada
Gregory R. Blue, Ph.D. (Cambridge)	World history; Intellectual/cultural history
Kenneth S. Coates, Ph.D. (British Columbia)	Northern Canada; native-white relations; Western Canada
Ralph C. Croizier, Ph.D. (Calif., Berkeley)	Modern China, art history
Brian W. Dippie, Ph.D. (Texas)	Intellectual-cultural; 19th century U.S. American West
M.L. (Mariel) Grant, Ph.D. (Oxford)	20th century Britain
Timothy J. Haskett, Ph.D. (Toronto)	Medieval Social and Legal History, Medieval England
James E. Hendrickson, Ph.D. (Oregon)	British Columbia; American West
G.R. Ian MacPherson, Ph.D. (Western Ontario)	Post-Confederation Canada; agrarian; cooperative history
Robert J. McCue, Ph.D. (Brigham Young)	Sixteenth Century Europe
Angus G. McLaren, Ph.D. (Harvard)	19th century European social history
John Money, Ph.D. (Cambridge)	18th century Britain
Michele M. Mulchahey, Ph.D. (Toronto)	Religious, intellectual and cultural history of the middle ages; medieval Italy
Patricia E. Roy, Ph.D. (British Columbia)	Post-Confederation Canada, British Columbia
Eric W. Sager, Ph.D. (British Columbia)	Atlantic Canada, social and economic history
Thomas J. Saunders, Ph.D. (Toronto)	Modern Germany; 20th century European culture-ideas
Donald L. Senese, Ph.D. (Harvard)	19th and 20th century Russia
Phyllis M. Senese, Ph.D. (York)	French Canada, women's studies, Post-Confederation Canada
E. Patricia Tsurumi, Ph.D. (Harvard)	Modern Japan, women's studies
Wesley T. Wooley, Ph.D. (Chicago)	U.S. diplomatic and political history, 20th century U.S.
David Wootton, Ph.D. (Cambridge)	Early Modern Intellectual History
David Zimmerman, Ph.D. (New Brunswick)	Military and naval history; Canadian science and technology

GRADUATE COURSES

Not all the following courses will be offered in a particular year. All courses are variable content. With Departmental permission, History 501 to History 590 may be taken more than once. Students should consult the Department concerning specific content of the courses offered in any given year.

HIST 500 (1½) HISTORIOGRAPHY
HIST 501 (3) FIELD IN AMERICAN HISTORY
HIST 502 (3) FIELD IN BRITISH HISTORY
HIST 503 (3) FIELD IN CANADIAN HISTORY
HIST 504 (3) FIELD IN EUROPEAN HISTORY
HIST 505 (3) FIELD IN ASIAN HISTORY
HIST 510 (1½) TOPICAL FIELD IN SOCIAL HISTORY
HIST 511 (1½) TOPICAL FIELD IN MILITARY HISTORY
HIST 512 (1½) TOPICAL FIELD IN INTELLECTUAL/CULTURAL HISTORY
HIST 513 (1½) TOPICAL FIELD IN WOMEN'S HISTORY
HIST 514 (1½) TOPICAL FIELD IN WORLD HISTORY
HIST 515 (1½) TOPICAL FIELD IN BUSINESS HISTORY
HIST 516 (1½) TOPICAL FIELD IN COMPUTERS AND HISTORY
HIST 517 (1½) TOPICAL FIELD IN NATIVE HISTORY
HIST 518 (1½) TOPICAL FIELD IN POLITICAL HISTORY
HIST 519 (1½) TOPICAL FIELD IN SPECIAL TOPICS
HIST 590 (1½ or 3) DIRECTED READING
HIST 597 (3) COMPREHENSIVE ORAL EXAMINATION (Grading: INC, COM, N or F)
HIST 598 (4½) EXTENDED RESEARCH PAPER (Grading: INC, COM, N or F)
HIST 599 (10½) M.A. THESIS (Grading: INC, COM, N or F)
HIST 699 (30) PH.D. THESIS (Grading: INC, COM, N or F)

HISTORY IN ART

The Department of History in Art offers programs of graduate study leading to the degrees of Master of Arts and Doctor of Philosophy. The program for each student is determined by the student's supervisory committee in consultation with the student. The Department also participates in the Cooperative Education program, and students who are interested in the possibility of gaining discipline-related work experience while they pursue their degree are invited to contact the Department's graduate adviser.

The M.A. program consists of a minimum of 21 units, comprising seven graduate seminars (1.5 units each), the thesis tutorial (HA 595),

and a 9 unit thesis (HA 599). All students are required to take at least two seminars (3 units) in non-western topics. Applicants for the M.A. program should have a broad academic background in the history of art, either through a major or honours degree in the history of art or a closely related field, or, if their degree is in some other discipline, through substantial coursework in the history of art. A student who does not have sufficient coursework in the history of art may still be admitted to the program, but will normally be required to complete a qualifying year consisting of additional coursework at the senior undergraduate level. All M.A. students will be required to demonstrate a reading knowledge of one language other than English which is appropriate to their area of study, and will not be permitted to sit their oral examination until this requirement has been satisfied.

The Ph.D. program consists of a minimum of 45 units, comprising 6 units of graduate seminars, 9 units of directed studies, the Comprehensive Examination (HA 695), the Candidacy Examination (HA 697), and a 30 unit dissertation (HA 699). Applicants for the Ph.D. program should have a Master's degree in the history of art or a closely related field from a recognized university, and demonstrate that they are capable of undertaking advanced research. (This capability will be judged on the basis of a Master's thesis or other scholarly work, including publications, as well as from letters of reference from qualified referees.) Ph.D. candidates will be required to demonstrate a good reading knowledge of at least two languages other than English which are appropriate to their area of study. In addition, they will be required to demonstrate a working knowledge of any additional languages which may be deemed by their supervisory committee to be essential for the successful completion of the dissertation. The oral examination for the dissertation may not take place until all language requirements have been satisfied. Substantial fieldwork is expected of all Ph.D. candidates.

Faculty and Research Interests

Kathlyn Liscomb, Ph.D. (Chicago)	Chinese art
John L. Osborne, Ph.D. (Courtauld Institute, London)	Early medieval Europe, classical tradition in western art
Elizabeth Tumasonis, Ph.D. (California, Berkeley)	19th and 20th century art
S. Anthony Welch, Ph.D. (Harvard)	Islamic art and architecture
Victoria Wyatt, Ph.D. (Yale)	North American Native arts

GRADUATE COURSES

Only a selection of the seminars (HA 501-580) will be offered in any particular year. All seminar courses and directed studies may be taken more than once, in different topics.

HA 501 (1½) SEMINAR IN METHODOLOGY

HA 502 (1½) SPECIAL TOPICS IN THE HISTORY OF ART
L. Matthew

HA 520 (1½) SEMINAR IN MEDIEVAL ART

HA 530 (1½) SEMINAR IN SOUTH/SOUTH-EAST ASIAN ART
A. Wright

HA 540 (1½) SEMINAR IN RENAISSANCE ART

HA 545 (1½) SEMINAR IN BAROQUE/18th CENTURY ART

HA 550 (1½) SEMINAR IN ISLAMIC ART

HA 560 (1½) SEMINAR IN MODERN ART: I

HA 561 (1½) SEMINAR IN MODERN ART: II

HA 565 (1½) SEMINAR IN NATIVE AMERICAN ART
V. Wyatt

HA 570 (1½) SEMINAR IN EAST ASIAN ART

HA 580 (1½) TOPICS IN CULTURAL RESOURCE MANAGEMENT

HA 590 (1½) DIRECTED STUDIES (M.A. Level)

HA 595 (1½) THESIS TUTORIAL (Grading: INP, COM, N or F)

HA 599 (9) M.A. THESIS (Grading: INP, COM, N or F)

HA 690 (1½-6) DIRECTED STUDIES (Ph.D. level) (Grading: COM, N or F)

HA 697 (0) CANDIDACY EXAMINATION (Grading: COM, N or F)

HA 699 (30) Ph.D. DISSERTATION (Grading: INP, COM, N or F)

LINGUISTICS

The Department of Linguistics offers programs of study and research leading to the degrees of Doctor of Philosophy and Master of Arts in the following areas:

1. Theoretical Linguistics, especially as this applies to grammatical theory, phonological theory, experimental phonetics, psycholinguistics.

2. Applied Linguistics, especially as this applies to Canadian English, dialectology, lexicology, English for non-native speakers, languages of the Pacific Rim, and indigenous languages of the Northwest.

Applicants to the Department of Linguistics should arrange to take the G.R.E. (Graduate Record Examination) and submit the results to the Faculty of Graduate Studies together with their application forms. Applicants whose native language is not English should consult the regulations concerning the Test of English as a Foreign Language (TOEFL) under Faculty of Graduate Studies regulation 1.1.

MASTER OF ARTS

The Department offers two programs of equal status, leading to the M.A. degree: (1) course work and thesis, and (2) course work only. Admission to either program normally requires a Bachelor's degree with a minimum overall average of B+ in the final year's work. A candidate with insufficient preparation may be required to register for a year as an unclassified undergraduate student or spend a year as a qualifying graduate student before being admitted to a degree program. Ordinarily a student once accepted into an M.A. program can expect to take two years to complete it. For either option mentioned, a minimum of 24 units of credit will be required for completion; however, students lacking undergraduate credit in the core courses 410A, 410B and 410C, 440, and 441 may have up to three credits added to their course requirements. At the discretion of the Department, up to six units may be taken at the senior undergraduate level; where deemed appropriate, all or part of these may be taken in another department. Of these six units, only three from 410A, B, and C, 440 and 441 may be counted towards the basic 24 units, and only if they have not already been counted at the undergraduate level. All candidates are required to complete Linguistics 503, 505 and 527 or 528 (1½ units each). In order to qualify for graduation, all students must demonstrate a reading knowledge of, or fluency in, French or some other language acceptable to the Department. Students planning on continuing into a Ph.D. program are advised to complete 508 (Current Issues in Generative Grammar) and 510 (Current Issues in Phonology).

Thesis Option

This program involves a minimum of 15 units of course work, including 581 (1½ units), plus 9 units of thesis (599). Additional units of undergraduate courses may be required, depending on the student's background.

Nonthesis Option

A student electing the nonthesis option is required to take 24 units of course work, subject to the conditions detailed above. Additional units of undergraduate courses may be required, depending on the student's background. Students will enroll in 597 (Comprehensive Examination) and be orally examined at the conclusion of the program on their knowledge of the discipline of Linguistics. The oral will be based on at least two previous research papers or their equivalent, and may also include an examination of other aspects of the student's course of study.

DOCTOR OF PHILOSOPHY

The Department also offers a program leading to the Ph.D. degree in Linguistics. The normal expectation is that a student entering the program has an M.A. degree. All students are admitted on a provisional basis; the candidacy examination will be held upon satisfactory completion of a minimum of 9 units of 600 level courses as specified by the Department. An acceptable dissertation proposal is expected from the Linguistics 690 course. Students will normally sit for candidacy exams in April or December following their entry into a Ph.D. program. In the case of students planning field work in the second year of the program, however, provision can be made for them to take part of their candidacy exams after such field work. In any event, the candidacy exams must be completed within 24 months of entry into the program. Students are required to take 30 units of credit (including their dissertation) beyond the M.A. degree for a Ph.D. The minimum duration for a Ph.D. program is two calendar years, but in general such a program will take at least three years to complete. In order to qualify for graduation, all students must demonstrate a reading knowledge of, or fluency in, two languages other than English acceptable to the Department; one of these will normally be French.

Inquiries concerning the graduate program should be addressed to the Graduate Studies Adviser, Department of Linguistics. Application forms for admission can be obtained directly from the Faculty of Graduate Studies.

Faculty and Areas of Interest

Barry F. Carlson, Ph.D. (Hawaii)	Wakashan, Salishan languages, phonology
John H. Esling, Ph.D. (Edinburgh)	Applied linguistics; acoustic phonetics; sociophonetics; second language acquisition
Barbara P. Harris, Ph.D. (University of Victoria)	Canadian English, English grammar, Chinook jargon; sociolinguistics
Thomas M. Hess, Ph.D. (Washington)	Western Canadian Indian languages; applied linguistics; Pacific Northwest mythology
Thomas E. Hukari, Ph.D. (Washington)	Grammatical theory, phonology, and Western Canadian Indian languages
Joseph F. Kess, Ph.D. (Hawaii)	Psycholinguistics, Austronesian languages; sociolinguistics
Geoffrey N. O'Grady, Ph.D. (Indiana)	Phonology; historical linguistics; Australian languages
Leslie Saxon, Ph.D. (Calif., San Diego)	Syntactic analysis, Athapaskan

GRADUATE COURSES

Students should consult the Department concerning courses offered in any particular field.

LING 500 (3) FIELD METHODS AND TECHNIQUES IN LANGUAGE ANALYSIS
The study of field methods and techniques in language analysis with the aid of native speakers. (*Prerequisite:* 410B and 441 or equivalents)
NO(3-0)

LING 501 (1½) CANADIAN ENGLISH
A history of the phonology, syntax, and vocabulary of Canadian English. (*Prerequisite:* 392 or equivalent)
H.J. Warkentyne NO(3-0)

LING 502 (1½) LINGUISTIC THEORIES
An introduction to the principles and methodological techniques of linguistic theories of language analysis other than the generative-transformational approach. NO(3-0)

LING 503 (1½) TRANSFORMATIONAL-GENERATIVE GRAMMAR
A survey of recent developments in transformational-generative semantic-syntactic theory. (*Prerequisite:* 410 or equivalent)
TBA F(3-0)

LING 505 (1½) PHONOLOGICAL THEORY
A survey of the development of phonological theory, including such topics as phonological universals. (*Prerequisite:* 441 or equivalent)
B.F. Carlson F(3-0)

LING 506 (1½) LEXICOLOGY AND LEXICOGRAPHY
The theory of lexicology and the practice of dictionary making.
NO(3-0)

LING 508 CURRENT ISSUES IN GENERATIVE GRAMMAR
Selected topics reflecting ongoing work in generative theory. (*Prerequisite:* 503 or equivalent)
T.E. Hukari S(3-0)

LING 509 (1½) SOCIOLINGUISTICS
Selected topics in recent research related to language variation.
B.P. Harris NO(3-0)

LING 510 (1½) CURRENT ISSUES IN PHONOLOGY
An examination of recent developments in phonological theory. (*Prerequisite:* 505 or equivalent)
B.F. Carlson S(3-0)

LING 513 (1½) PROBLEMS IN GRAMMATICAL ANALYSIS
Special studies selected on an individual basis to allow a student to pursue a particular topic in grammatical analysis. (*Prerequisite:* 508 which may be taken concurrently or permission of the Department)
NO(3-0)

LING 515 (1½) PROBLEMS IN PHONOLOGICAL ANALYSIS
Special studies selected on an individual basis to allow a student to pursue a particular topic on phonological analysis. (*Prerequisite:* 510 which may be taken concurrently, or permission of the Department)
NO(3-0)

LING 517 (1½) EXPERIMENTAL PHONETICS LABORATORY
Topics in the synthesis and analysis of speech. (*Prerequisite:* 380 or equivalent) NO(3-0)

LING 518 (1½) PROJECTS IN EXPERIMENTAL PHONETICS
Students will be guided in designing and carrying out experiments on an individual basis in the area of the acoustics and physiology of speech. (*Prerequisite:* 517 or equivalent) NO(3-0)

LING 520 (1½) PACIFIC RIM LANGUAGES
An overview of the structure of selected indigenous languages spoken around the Pacific Rim. One of the following will be offered in a given term: 520-A (1½) North American Indian Languages; 520-B (1½) Austronesian Languages; 520-C (1½) Australian Languages; 520-D (1½) East Asian Languages.
G.N. O'Grady NO(3-0)

LING 524 (1½) ROMANCE LINGUISTICS
Recent developments in comparative Romance linguistics; particular emphasis will be placed on contrastive features. NO(3-0)

LING 527 (1½) HISTORICAL AND COMPARATIVE LINGUISTICS: INDO-EUROPEAN
An investigation of language change through time. Theoretical considerations in the reconstruction of phonological and other linguistic subsystems. An integrated account of the evolution of the principal Indo-European languages.
G.N. O'Grady F(3-0)

LING 528 (1½) HISTORICAL AND COMPARATIVE LINGUISTICS: NON-INDO-EUROPEAN
An investigation of evolution of languages other than Indo-European.
NO(3-0)

LING 560 (Anthropology 560) (1½) LINGUISTIC ANTHROPOLOGY
NO(3-0)

LING 570 (PSYC 570) (1½-3) PSYCHOLINGUISTICS
A seminar offered in collaboration with the Department of Psychology.

Selected topics of interest in understanding the comprehension and production of natural language are examined. The most recent topics have been sentence processing, discourse analysis, linguistic inference and the resolution of ambiguity, and the development of cognitive science interests in reasoning and discourse processes as well as the structure of mental representations.
J.F. Kess F(3-0)

LING 571 (PSYC 571) (1½ or 3) DEVELOPMENTAL PSYCHOLINGUISTICS
A seminar offered in collaboration with the Department of Psychology. Selected topics of interest in understanding the acquisition of the child's first language in the areas of phonological and grammatical abilities, as well as the child's knowledge of semantic systems and discourse rules. Recent topics have been the development of conversational abilities in children, including turn taking, questioning and answering, and politeness and negotiation in speech acts.
J.F. Kess NO(3-0)

LING 574 SEMINAR IN APPLIED LINGUISTICS
A survey of second language learning and teaching theory and TESL/TEFL methodology with emphasis on adult, college and university, and overseas student populations. Evaluation of research and applications as related to socio - and psycholinguistic principles and to adult second language acquisition in natural settings.
J.H. Esling F(3-0)

LING 580 (1½ or 3) LINGUISTICS SEMINAR
(The contents of this course will vary.) (May be repeated for credit)
L. Saxon S(3-0)

LING 581 (1½ or 3) LINGUISTICS COLLOQUIUM
Students will prepare a written research paper (20-30 pages) and present it at a linguistics colloquium. Topics will be of current interest, bearing on linguistic theory, arising from the student's work or individual research. (May be repeated for credit) (*Prerequisite:* Graduate standing)
B.F. Carlson FSY

LING 586 (1½) PHONETICS FOR APPLIED LINGUISTICS
An investigation of the relationship between theory, speech analysis, pronunciation teaching, and second language acquisition. NO(3-0)

LING 590 (1½ or 3) DIRECTED STUDIES
A course designed to enable students to pursue individual interests. (May be repeated for credit)
Members of Department

LING 597 (0) COMPREHENSIVE EXAMINATION
Members of Department (Grading: INP, Com, N or F)

LING 599 (Credit to be determined) THESIS
Members of Department (Grading: INP, Com, N or F)
Students enrolled in courses numbered 601 to 603 will explore current areas of research in the Linguistics literature, under the direction of their supervisory committee and other members of the Department. Each course may be repeated to a maximum of 3 units.

LING 601 (1½ or 3) INDIVIDUAL STUDIES IN SYNTAX
(*Prerequisites:* 502, 503 or equivalent courses, and graduate standing)
Members of Department

LING 602 (1½ or 3) INDIVIDUAL STUDIES IN PHONOLOGY
(*Prerequisites:* 505 or an equivalent course, and graduate standing)
Members of Department

LING 603 (1½ or 3) INDIVIDUAL STUDIES IN HISTORICAL LINGUISTICS
(*Prerequisites:* 527 or an equivalent course, and graduate standing)
Members of Department

LING 690 (1½ or 3) INDIVIDUAL STUDIES
Topics (A, B, C, etc.) will be assigned at the beginning of each year. A research topic will be pursued in depth under the direction of the student's supervisor. Students will be expected to write a research paper (or papers) and to give an oral report to the supervisor and interested members of the Department. It is anticipated, but not required, that this research will provide background material for a Ph.D. Dissertation. This course may be repeated for credit to a maximum of 6 units. (*Prerequisites:* Admission to a Ph.D. program in Linguistics and 502, 503 and 505 or the equivalent)
Members of Department

LING 699 (Credit to be determined) PH.D. DISSERTATION
Members of Department (Grading: INP, Com, N or F)

MATHEMATICS AND STATISTICS

The Department of Mathematics and Statistics offers graduate programs leading to the degrees of Master of Arts and Master of Science. A Ph.D. program is also available by special arrangement.

There are two distinct types of Master's programs: a conventional program which emphasizes the theory and foundations necessary for contemporary areas of research, and an applied program which focuses on the applications of theory to problems in the mathematical sciences or other disciplines.

Students admitted to a conventional Master's program in the Department will normally have the equivalent of a Bachelor's degree in Mathematics. Each student must complete a program of study consisting of a minimum of 15 units. This program will normally consist of a thesis of 4 to 6 units, 8 units of courses at the 500 level or higher, including the Graduate Seminar, and the remaining units at the 400 level or higher. In exceptional circumstances the program may consist of 12 units of courses at the 400 level or higher.

Students admitted to an applied Master's program in the Department will normally have a Bachelor's degree in Mathematics or a related field. Each student must complete a program of study consisting of a minimum of 15 units. This program will consist of at least 8 units of courses at the 500 level or higher, including the Graduate Seminar, and usually some courses in mathematical modelling, statistics, operations research, or computational methods, and a thesis of 6 units consisting of a substantial contribution to a problem from an applied area. The thesis is a distinctive feature of this program. The Department will assist students in identifying suitable problems from appropriate areas of application. The student will be expected to maintain contact with the individual or organization from which the problem originated.

It should be emphasized that the stated requirements of the above programs are minimum requirements and additional work may be required of individual students. A student without the necessary background may be required to make up any deficiency. In so doing, the student will be expected to obtain a grade of at least B (5.00) in each makeup course, and an average of at least B+ (6.00) overall in the makeup courses.

The Department of Mathematics and Statistics may accept appropriate courses from other departments for credit towards a Master's degree in Mathematics. Such courses should be selected in consultation with the student's Supervisory Committee.

A graduate student is governed by the Departmental regulations in force at the time of the student's initial graduate registration.

For each graduate student there shall be a Supervisory Committee of at least three members approved by the Faculty of Graduate Studies, one of whom shall be from outside the Department. The Committee shall recommend to the Department Chair and then to the Faculty of Graduate Studies a program of studies. For a thesis candidate the Committee shall examine the thesis and conduct a final oral examination of the candidate on the thesis. For a nonthesis candidate the Committee shall conduct both a written and an oral examination of the candidate on the discipline. In both cases, the final oral will be chaired by the Dean of Graduate Studies or the Dean's nominee. The Committee may conduct other examinations. The Department Chair and the Committee

shall recommend to the Faculty of Graduate Studies that a degree be awarded to a successful candidate.

The student is responsible for becoming familiar with other regulations as outlined in the University Calendar and the Calendar of the Faculty of Graduate Studies.

Faculty and Fields of Research

Ernest J. Cockayne, Ph.D. (British Columbia)	Graph theory, combinatorics
Roger R. Davidson, Ph.D. (Florida State)	Statistics, applied probability
Denton E. Hewgill, Ph.D. (British Columbia)	Partial differential equations
Albert Hurd, Ph.D. (Stanford)	Nonstandard analysis, dynamical systems, partial differential equations
Reinhard Illner, Ph.D. (Bonn)	Mathematical physics, partial differential equations, applied mathematics
Bruce R. Johnson, Ph.D. (Oregon)	Mathematical statistics, probability
David J. Leeming, Ph.D. (Alberta)	Approximation theory
Robert A. MacLeod, Ph.D. (Alberta)	Number theory
C. Robert Miers, Ph.D. (Calif., Los Angeles)	Functional analysis, ring theory
Donald J. Miller, Ph.D. (McMaster)	Algebra, graph theory
Gary G. Miller, Ph.D. (Missouri)	Topology, logic, general relativity, quantum theory
Robert E. Odeh, Ph.D. (Carnegie Institute of Technology)	Statistics
William E. Pfaffenberger, Ph.D. (Oregon)	Functional analysis, operator theory
John Phillips, Ph.D. (Oregon)	Operator algebras, operator theory
William J. Reed, Ph.D. (British Columbia)	Stochastic modelling and statistics in resource management and economics
Ahmed R. Sourour, Ph.D. (Illinois)	Functional analysis, operator theory, linear algebra
Hari M. Srivastava, Ph.D. (Jodhpur)	Analysis, applied mathematics, mathematical physics
Pauline van den Driessche, Ph.D. (Wales)	Mathematical models in biology, combinatorial matrix analysis

GRADUATE COURSES

Students should consult the Department of Mathematics and Statistics concerning courses offered in any particular year.

MATHEMATICS

MATH 510 (2 or 4) ABSTRACT ALGEBRA

MATH 511 (2 or 4) TOPICS IN MATRIX THEORY AND LINEAR ALGEBRA

MATH 520 (2 or 4) NUMBER THEORY

MATH 522 (2 or 4) COMBINATORICS

(*Prerequisite:* 422 or permission of the Department)

MATH 523 (2 or 4) GRAPH THEORY

(*Prerequisite:* 423 or permission of the Department)

MATH 530 (2 or 4) ABSTRACT MEASURE AND INTEGRATION THEORY

Syllabus: Measure spaces, inner and outer measure. Carathéodory extension, convergence theorems, signed and complex measures, decomposition theorems. Radon-Nikodym theorem, product measures. Baire, Borel and Haar measures. Riesz representation theorem.

MATH 531 (2 or 4) FUNCTIONAL ANALYSIS

MATH 532 (2 or 4) INTRODUCTION TO OPERATOR THEORY

MATH 533 (2 or 4) TOPICS IN OPERATOR THEORY AND OPERATOR ALGEBRAS

(May be taken more than once in different areas with the permission of the Chair of the Department)

MATH 535 (2 or 4) TOPICS IN ANALYSIS

Topics may include some of the following: ergodic theory, dynamical systems, potential theory, harmonic analysis. (May be taken more than once in different areas with the permission of the Chair of the Department)

MATH 540 (2 or 4) TOPOLOGY

MATH 550 (2 or 4) TOPICS IN APPLIED MATHEMATICS

(May be taken more than once in different areas with the permission of the Chair of the Department)

MATH 551 (2 or 4) DIFFERENTIAL AND INTEGRAL EQUATIONS

MATH 555 (2 or 4) TOPICS IN PROBABILITY

(May be taken more than once in different areas with the permission of the Chair of the Department)

MATH 560 (2 or 4) MATHEMATICAL MODELS

The formulation, analysis and interpretation of mathematical models of selected scientific topics.

MATH 581 (2 or 4) DIRECTED STUDIES

Directed studies may be available in the areas of faculty interest. (May be taken more than once in different areas with the permission of the Chair of the Department)

MATH 585 (2 or 4) GRADUATE SEMINAR

(May be taken more than once in different areas with the permission of the Chair of the Department)

MATH 586 (2) OPERATOR THEORY SEMINAR

(May be taken more than once with the permission of the Chair of the Department)

MATH 587 (2) APPLIED MATH SEMINAR

(May be taken more than once with the permission of the Chair of the Department)

MATH 591E (1 1/2) TOPICS IN MATHEMATICS FOR SECONDARY TEACHERS

Intended for students enrolled in a Master's program specializing in Mathematics Education but open to students enrolled in other master's programs in Education. One of the four topics: Geometry, Mathematical Modelling, Data Analysis, History & Philosophy of Mathematics will be taught in a given term. Topics will be rotated each term the course is offered. (This course may be taken more than once provided topics are not repeated) (*Prerequisites:* 3 units of 300 level mathematics)

MATH 599 (4-6) MASTER'S THESIS (Grading: INP, Com, N or F)

STATISTICS

STAT 552 (2 or 4) APPLIED STOCHASTIC MODELS

STAT 553 (2 or 4) MULTIVARIATE ANALYSIS

STAT 554 (2 or 4) TIME TIME SERIES ANALYSIS

STAT 556 (2 or 4) TOPICS IN STATISTICS

(May be taken more than once in different areas with the permission of the Chair of the Department)

STAT 557 (2 or 4) SAMPLING TECHNIQUES

STAT 558 (2 or 4) GENERAL LINEAR MODELS

STAT 561 (2 or 4) THEORY OF INFERENCE

STAT 562 (2 or 4) DISTRIBUTION FREE STATISTICS

DEPARTMENT OF MECHANICAL ENGINEERING

Degree of Master of Engineering

The Department offers programs of study in Mechanical Engineering leading to the degrees of Master of Engineering (M.Eng.), Masrer of Applied Science (M.A.Sc.) and Doctor of Philosophy (Ph.D.).

The M.Eng. program is designed to provide students with an opportunity to strengthen and extend the knowledge they have gained at the undergraduate level. It consists of eighteen units of course work, including the course MECH 598.

The work leading to the project must be performed under the direction of an academic supervisor who is a member of the Department's graduate faculty. It must be described in detail in a formal report written by the student. The oral examination of student will be based on the project. Each student's program is subject to the approval of the Department.

Degree of Master of Applied Science

The work leading to the degree of M.A.Sc. provides an opportunity for the student to pursue advanced studies and to carry out research or undertake creative design in a field of mechanical engineering under the supervision of a member of the Department's graduate faculty.

The program for the M.A.Sc. degree consists of a minimum of nine units of course plus a thesis of nine units. The topic of the thesis and the required course work are subject to the approval of the Department.

Degree of Doctor of Philosophy

The objective of the Ph.D. program is the accomplishment of independent and original research work leading to significant advancement of knowledge in the field of mechanical engineering.

The minimum requirement for admission to the doctoral program is a master's degree in science or engineering. In exceptional cases, a student registered for a master's degree in the Department of Mechanical Engineering may be allowed to transfer to the doctoral program without completing the masters program.

A student entering the doctoral program with a master's degree is required to complete a program of thirty-three units. This program includes a minimum of six units of approved courses and a thesis equivalent to twenty-seven units.

A student transferring from a master's program to the doctoral program is required to complete a program of at least forty-five units. This program includes a minimum of eighteen units of approved courses and a thesis equivalent to twenty-seven units. For those students transferring from a master's program, credit will normally be given for any courses already completed.

All Ph.D. candidates are required to pass an oral candidacy examination. This examination must be taken no later than fifteen months after initial registration in the doctoral program. They will be assessed on the basis of oral examinations on fundamentals related to their field of research, and on the basis of a written research proposal which must be defended orally before their supervisory committee.

Co-operative Option

The Department participates in the Co-operative Education Program of the Faculty of Graduate Studies. Under this program, an M.Eng. or M.A.Sc. student normally spends the first year of the program on course work. The second year is spent working at a paid research-related position in either industry or government. During the third and subsequent years, the student alternates between the University and the place of work to complete the research and write and defend the thesis.

Under exceptional circumstances, when it is quite evident that the industrial work periods form an essential and integral part of a student's thesis project, a Ph.D. student may participate in the cooperative graduate program.

Participation in the co-operative program requires:

i) Student's acceptance by a suitable sponsoring organization; and,
ii) the organization's agreement to allow the publication of the student's research findings in open literature.

Facilities

The Department has excellent research facilities. These include extensive computational resources, hardware and software, a four axis milling machine, a two axis lathe, a comprehensive robot laboratory, and a versatile material testing machine. In addition, the Department laboratories are well equipped for the state of the art measuring equipment for work related to stress analysis, vibrations, and flow problems.

Applications

Initial inquiries regarding graduate studies in Mechanical Engineering should be addressed to the Graduate Advisor, Department of Mechanical Engineering, together with transcripts.

Faculty and Research Interests

Allan Doige, Ph.D. (Purdue)	Acoustics and vibrations
Zuomin Dong, Ph.D. (New York State)	Computer aided design/computer aided manufacture (CAD/CAM)
Sadik Dost, Ph.D. (Istanbul)	Applied mechanics, biomechanics, and materials
James B. Haddow, Ph.D. (Manchester)	Elasticity, plasticity, viscoelasticity, thermoelasticity
Gerard F. McLean, Ph.D. (Waterloo)	Image processing
Ron Podhorodeski, Ph.D. (Toronto)	Robotics, mechanics and design
David S. Scott, Ph.D. (Northwestern)	Energy systems
Yury Stepanenko, Ph.D. (Moscow D.Sc. (Academy of Science, U.S.S.R.)	Robotics, dynamics and control
Behrouz Tabarrok, D.Phil. (Oxon.)	Stress analysis, vibrations, heat transfer, fluid flow, finite elements, buckling analysis, dynamics
Geoffrey W. Vickers, Ph.D. (Manchester)	Computer aided design and manufacture
Joanne Wegner, Ph.D. (Alberta	Dynamics, continuum mechanics, viscoelasticity

GRADUATE COURSES

The following courses are offered by the Department. However, some courses may not be offered this year.

Students who have taken content equivalent courses at the university of Victoria or elsewhere will not be permitted to take these courses again for credit.

For engineering (ENGR) courses, see page 261.

MECH 501 (1½) CONTINUUM MECHANICS
Analysis of deformation. Analysis of stress, including Cauchy and Piola-Kirchhoff stress tensors. Virtual work, energy balance, entropy inequality, constitutive equations, equations of classical elasticity, thermoelasticity, and viscous flow. (3-0)

MECH 502 (1½) INTRODUCTION TO ELASTIC STABILITY
Stability, methods of elastic stability. Stability of elastic columns; equilibrium, energy, dynamic and initial imperfection approaches. Beams - columns. Frames. Beams supported by elastic foundations. Plates. (3-0)

MECH 503 (1½) APPLIED ACOUSTICS
The acoustic wave equation with solutions for plane and spherical cases; acoustic intensity and impedance. Transmission and reflection of sound between media; normal and oblique incidence. Absorption and attenuation of sound waves in fluids. Radiation of acoustic sources in a free field. Acoustics of cavities and ducts; travelling wave and standing wave representations, transmission matrices for plane-wave acoustics with applications to resonators, filter and complete piping or duct systems. Electrical circuit analogy of the internal impedance and strength of

acoustic sources. Elements of environmental, architectural and underwater acoustics. (3-0)

MECH 504 (1½) MECHANICAL VIBRATION
Multi-mass linear systems; flexibility and stiffness matrices, natural frequencies, mode shapes and orthogonal properties, coupled and uncoupled system equations, solutions for damped or undamped response to arbitrary forcing and initial conditions. Linear continuous systems; wave equation problems and lateral beam vibration with classical boundary conditions. Effects of added mass or stiffness on frequencies and modes. Forced and transient response. Transfer matrix methods for lumped parameter systems and continuous systems; application to axial and torsional vibration of rods, shafts and beams with attached mass or stiffness. Non-linear vibration; basic methods for solution. Characteristic non-linear effects. Random vibration; elements of describing random response, Fourier transforms and frequency response functions. (3-0)

MECH 505 (1½) ELASTICITY AND VISCOELASTICY
Constitutive relations for classical elasticity. Plane problems — Airy stress function, torsion problem, bending of beams, variational methods. Introduction to linear viscoelasticity; differential and integral forms of viscoelastic constitutive relations. Correspondence principle. Viscoelastic beam problems, some dynamic problems. (3-0)

MECH 506 (1½) WAVE MOTION
Main classes of wave motion, hyperbolic systems and examples from gas dynamics. Some topics in wave propagation, including wave propagation in elastic solids, and linear dispersive waves. (3-0)

MECH 507 (1½) ANALYTICAL DYNAMICS
Review of Newton's equations. Generalized coordinates, constraint equations, virtual displacements, work function and potential energy, stability of equilibrium, d'Alembert's principle, conservation of energy, Gauss' principle of least constraint, Lagrange's equation, dissipating forces, introduction to calculus of variations, Hamilton's principle, phase space, principle of least action, and Hamilton Jacobi's equation. (3-0)

MECH 508 (1½) LINEAR VISCOELASTICITY
Integral forms of constitutive equations, differential operator forms of constitutive equations. Boundary value problems, integral transform methods, and dynamic problems. (3-0)

MECH 509 (1½) NONLINEAR ELASTICITY
Analysis of deformation, discussion of Cauchy, Nominal and Piola-Kirchhoff stresses. Objectivity, strain energy functions, thermodynamics of finite elastic deformation, problems of controllable deformation, problems of infinitesimal deformation superimposed on finite deformation. (3-0)

MECH 510 (1½) NON-LINEAR DYNAMICS AND CHAOS
Undamped free oscillations; some exact solutions, perturbation methods, harmonic balance, Ritz method. Damped free oscillations; influence of small damping terms, method of slowly changing phase and amplitude, limit cycles. Forced oscillations; classical approaches, periodic attractors, strange attractor, chaotic attractor, Poincare map. Liapounov stability theory and bifurcations. Self excited oscillations. Hamiltonian systems. (3-0)

MECH 511 (1½) INTRODUCTION TO CONTINUUM MECHANICS
Analysis of deformation, motion and stress in Cartesian coordinates. Thermodynamics of continua. Constitutive equations. Linear elasticity. Fluid flow. Special problems in linear elasticity and fluid mechanics. (3-0)

MECH 512 (1½) VARIATIONAL METHODS IN OPTIMAL CONTROL THEORY
Relationships between extremum problems and optimal control; the Euler equation, the Legendre conditions; classification of extremum problems (variable endpoints, transversality conditions, extremals with breaks etc.), conditional extremums, isoperimetric problems, Lagrange, Maier and Bolza problems; variational problems in parametric form; introduction to the field theory; Jacobi, Legendre and Weierstrass conditions; extremum problems with constraints, linear optimum control problem, the Maximum Principle (Pontrjagin); the Dynamic Programming (Bellman); and examples of applications of variational methods. (3-0)

MECH 520 (1½) COMPUTER-AIDED DESIGN (CAD)
Basic elements of CAD and relevance to current industrial practice. Computational geometry for designand 3-D geometry. Methods for curve and surface fitting. Input and output devices for computer graphics, passive as well as active. Representation of physical surfaces and computer aided drafting. Graphical programming languages. Development of interactive 3-D computer graphics. (*Prerequisite:* 150 or equivalent) (3-0)

MECH 521 (1½) COMPUTER-AIDED MANUFACTURE (CAM)
Review of common manufacturing processes and the organization of the manufacturing unit. Manufacturing process aided by computers. Numerically controlled machine tools. Numerically controlled part programming. Machining of doubly curved surfaces. Computerized numerically controlled tools and adaptive control systems. Industrial robots. Application of CAD/CAM in engineering and medicine. (*Prerequisite:* ENG 502) (3-0)

MECH 531 (1½) ADVANCED FLUID MECHANICS
Fundamental Equations; motion, stress, constitutive relations. Two dimensional flow; Viscous flow, inviscid flow, boundary layer theory and potential flow. Introduction to gas dynamics. (3-0)

MECH 532 (1½) HYDRODYNAMICS
Introduction — Historical sketch; definitions. Fluids at rest — equilibrium conditions; barotropic media; effects of gravity; equilibrium of revolving fluid masses Vortex Motion of Ideal Fluids — Introduction and review; the fundamental theorems of vorticity; vorticity dynamics; vorticity-induced velocity fields; vortex motions in two dimensions; vortex streets. Body Hydrodynamics — d'Alembert's paradox; forces in steady and unsteady motions; moving-body dynamics. (3-0)

MECH 541 (1½) ADVANCED THERMODYNAMICS
Principles of classical thermodynamics; postulates, conditions of equilibrium, some relationships and sample systems, reversible process, Legendre transformations, extremum principles, Maxwell relations, stability, first-order phase transitions. Statistical thermodynamics' micro canonical formalism, canonical formalism and generalised canonical formulations. (3-0)

MECH 542 (1½) EXERGY ANALYSIS AND ENERGY SYSTEMS
Second law efficiencies. Exergy property relations. Chemical exergy and fuel chemical exergy. Energy systems modelling and macro models. (3-0)

MECH 550 (1½) ADVANCED CONTROL THEORY
State-space representation of dynamic systems, linear system dynamics, state transition matrices, canonical forms. Controllability and observability, shaping the dynamic response, linear observers. Compensator design, linear quadratic optimal control. (3-0)

MECH 551 (1½) ADVANCED KINEMATICS OF MANIPULATORS
The material covered includes: point and direction, and line and screw motion description; homogeneous, line and screw coordinate, and quaternion representations; inverse displacement solution by anayltic, root finding, hybrid and numerical methods; appropriate frames of reference; screw systems and transforms; local and globally optimum solution of redundant rates; overdetermined and near degeneration solutions; multi-arm kinematics. Application to open, closed parallel and hybrid, simple and general structures is considered. (3-0)

MECH 553 (1½) ROBOTICS: MECHANICS AND CONTROL
Kinematics (open and closed chains); statics (force control of quasi-static manipulator motions and impedance); dynamics (Lagrange and Newton-Euler approaches), structures of the algorithms for computer simulation; and robotic control (non-linear state-feedback robot control, pole-placement technique; "computed torque," "direct designs," and "interception" robot control methods). (3-0)

MECH 555 (1½) COMPUTER VISION
Review of Image Processing; point operations, digital filtering, frequency domain processing. Boundary Detection; edges and edge detection, thresholding, line thinning, gap filling, rough transform. Region Segmentation; generalized segmentation schemes, region growing, split/merge, simulated anneal, texture classification and description. (3-0)

MECH 556 (1½) CLUSTER ANALYSIS
Data Representation. Features, data and independence. Discrimination in feature space. Statistical methods, nearest neighbour techniques. Hierarchical clustering techniques. Convergence theorems, and error-bounds. Validating clusters. Applications. (3-0)

MECH 561 (1½) ANALYTICAL METHODS IN ENGINEERING
Analytic Functions and Applications in Fluid Mechanics: multi-valued complex functions, analytic functions, Cauchy integral theorem, residues, singularities, conformal mapping and applications. Laplace transform and its applications to elementary problems in vibrations, wave propagation and heat transfer in solids. Fourier analysis and boundary value problems and applications in vibration, wave propagation, solid mechanics. Introduction to calculus of variation. Energy methods, and approximate methods in solid and fluid mechanics. (3-0)

MECH 562 (1½) ENGINEERING ANALYSIS
Set theory, linear vector spaces, normal spaces, inner product spaces, linear functionals and operators, introduction to generalized functions and distribution theory. Engineering applications. (3-0)

MECH 563 (1½) FINITE ELEMENT ANALYSIS
Introduction to the basic principles of finite element analysis. Development of discrete equations for problems of 1, 2, and 3D elasticity. Applications to problems of stress analysis, vibrations, heat transfer and fluid flow. This course should be of interest to mechanical and electrical engineers as well as students from the Department of Computer Science and Mathematics. (3-0)

MECH 590 (1½) DIRECTED STUDIES
A wide range of topics will be available for assignments.

MECH 598: (3-6) M.ENG. PROJECT REPORT (Grading: INP, COM, N or F)

MECH 599: (9) M.A.Sc. THESIS (Gading: INP, COM, N or F)

MECH 651 (1½) NONLINEAR AND ADAPTIVE IMAGE PROCESSING
Recent trends in adaptive image processing. Historical Perspectives. Spatially adaptive techniques. Adaptation mechanisms and indicator functions. Adaptive noise suppression. Adaptive enhancements of edges. Adaptive image coding. Image models and homomorphic transforms. Synthetic highs and second generation image processing. Correlates in biological vision systems. (*Prerequisite:* MECH 444) (3-0)

MECH 699 (24) Ph.D. DISSERTATIONS(Grading: INP, COM, N or F)

MUSIC

All Master's programs in the School of Music require a minimum attendance of two winter sessions and at least 24 units of course credit, of which six units may be undergraduate courses at the 300 level or above.

M.A. AND PH.D. IN MUSICOLOGY

Admission

Applicants are requested to send, along with official transcripts of previous college study, examples of their work in the field of music history, such as honours papers or Master's thesis, which will be returned.

Language requirement

M.A. A *good* reading knowledge of German and French is required *before* admission. Applicants with a reading knowledge of another foreign language may be accepted provisionally, but must demonstrate their proficiency in German and French to the School by December of their first year of graduate study at the University of Victoria. A reading knowledge of other foreign languages may be required if necessary to the applicant's intended field of specialization. Courses taken to fulfill this requirement are considered remedial, and units earned thereby will not be counted toward the course requirements.

Ph.D. Same requirements as above upon entering, but the student must also pass a reading examination in French and German before December of the second year of attendance.

A reading knowledge of other foreign languages may be required if necessary to the applicant's intended field of specialization.

Comprehensive examinations

Comprehensive examinations in Theory, History and Musicology may be taken in December or April of each year. Full time M.A. students are required to complete these to the School's satisfaction by the end of their first year in the program. Part time M.A. students will be advised during their first year in the program when they should expect to complete these examinations.

Ph.D. dissertation prospectus

A prospectus will be required for submission to the student's supervisory committee and should include (1) a description of the research situation in the chosen field of study, including detailed, specific references to existing published studies, their scope and limitations; (2) a precise statement of the research problem or problems upon which the dissertation is to focus, and a summary of the proposed plan of study; (3) a description of the state of the primary source materials and their immediate availability; and (4) as an appendix, a selected but comprehensive bibliography (preferably annotated) of *directly* relevant books and articles.

M.A. Thesis

The thesis should be completed during the last term of residence.

Ph.D. dissertation

This should be a significant contribution to original musicology research.

M.A. IN MUSICOLOGY WITH PERFORMANCE

This program is intended for musicology students who are proficient performers and wish to continue serious study of their instrument while pursuing musicological research.

Admission

Applicants must submit the materials requested under "M.A. and Ph.D. in Musicology" above, and must arrange for an audition as described under "M.Mus. in Performance." A theory placement examination must be passed prior to admission to the program.

Language requirements

As specified under "M.A. and Ph.D. in Musicology."

For further details regarding this program see the School of Music Graduate Handbook.

* M.MUS IN COMPOSITION

An applicant for admission to the M.Mus. program in Composition should send, at the earliest possible date, copies of scores and tapes of recent work, together with an official transcript of previous study and two letters of reference.

Upon admission, an individual course of study will be arranged, including private instruction in composition, and theoretical and histori-

cal studies. Opportunities are available to work in the School's well equipped electronic music studio and to take part in solo and ensemble performance.

Candidates for the degree will be required to complete an extensive original composition for instruments, voices, or mixed media. This work normally will be performed during the final year of graduate study.

* M.MUS. IN PERFORMANCE

It is preferable for applicants to visit the School for an interview and audition in their performance medium. When that is impractical, a high quality tape recording must suffice. This should be at least thirty minutes duration and present solo playing of two or more works in contrasting style. Acceptance via tape is always provisional pending audition in person upon arrival in September.

Acceptance for the M.Mus. in Performance requires specialization at advanced level in a specific performance medium (for example, trumpet, piano, voice). Further growth as a soloist and ensemble participant is a degree requirement, formal evidence of which is demonstrated through the candidate's degree recital.

The candidate's individual program is devised to accomplish this and to complement it with study in related areas, e.g., conducting, performance practices, composition, theory, music history, theatre, history in art, languages.

* Students enrolled in a program leading to the M.Mus. degree in composition and performance are required to take an oral examination reflecting on the students' composition or repertoire respectively. For details, see the School of Music graduate handbook.

Faculty and Areas of Interest

John A. Celona, Ph.D. (Calif., San Diego)	Composition, theory
William Kinderman, Ph.D. (Calif., Berkeley)	History, analysis and criticism of 19th century music, Beethoven's sketches and compositional process, later 19th century German tonal practice
Paul Kling, Artist's Diploma (Academy of Musical Arts, Prague)	Violin
Harald Krebs, Ph.D. (Yale)	Theory
Gordana Lazarevich, Ph.D. (Columbia)	Music history, musicology, Mozart, Haydn, 18th century comic opera, and Canadian cultural studies
Michael M. Longton, M.M. (Brit. Col.)	Theory, computer generated music
Louis D. Ranger, B.Mus. (Juilliard)	Trumpet, brass chamber music
Erich Schwandt, Ph.D. (Stanford)	Music history, musicology/ Baroque music, Lully
Bruce Vogt, M.Mus. (Toronto)	Piano
Ian McDougall, M.Mus. (Brit. Col.)	Trombone, big band
Alexandra Pohran, B.Mus. (Toronto)	Oboe, chamber music
Lanny R. Pollet, M.Mus. (Victoria)	Flute, chamber music
W. Andrew Schloss, Ph.D. (Stanford)	Electronic/computer music, musical acoustics

GRADUATE COURSES

Students should consult with the School of Music concerning the courses offered in any particular year.

Apart from the following courses, graduate students are encouraged to take an active part in the performing groups and musical life of the University.

¤ MUS 500 (1½ or 3) SELECTED PROBLEMS IN THEORY AND ANALYSIS (3-0)

MUS 501 (1½ or 3) SEMINAR IN HISTORICAL MUSICAL NOTATIONS (3-0)

MUS 502 (3) MUSICAL AESTHETICS AND THE THEORY OF CRITICISM NO(3-0)

MUS 503 (1½) INTRODUCTION TO GRADUATE STUDY AND MUSIC BIBLIOGRAPHY
(All students in musicology must register for this course in their first term of graduate study.) (3-0)

MUS 504 (1½ or 3) SEMINAR IN PERFORMANCE PRACTICE (3-0)

MUS 505 (1½ or 3) HISTORY OF MUSICAL INSTRUMENTS NO(3-0)

MUS 506 (1½) MUSICAL ACOUSTICS (3-0)

MUS 507 (3) ELECTRONIC MUSIC (0-3)

MUS 540 (1) INDIVIDUAL TUITION
Lessons in instrument or voice. (Approval of the student's Supervisory Committee is required.) (0-1)

¤ MUS 545 (4) MAJOR INSTRUMENT STUDY
Individual tuition and master class. (For M.Mus. candidates in performance only) (2-2)

¤ MUS 550 (1½) STUDIES IN PARTICULAR ERA OF MUSIC HISTORY (3-0)

¤ MUS 551 (1½ or 3) STUDIES IN PARTICULAR FORMS OR GENRES IN MUSIC HISTORY (3-0)

¤ MUS 552 (1½ or 3) STUDIES IN THE MUSIC, LIFE AND TIMES OF INDIVIDUAL COMPOSERS (3-0)

¤ MUS 555 (3) INDIVIDUAL TUITION IN COMPOSITION Y(0-1)

**** MUS 560 (1½ or 3) SEMINAR IN MUSICOLOGY**
(May be taken more than once for credit to a maximum of 3 units in any 8 month session) Y(3-0)

MUS 561 (1½ or 3) SEMINAR IN COMPOSITION
(May be taken more than once for credit to a maximum of 3 units in any 8 month session)

¤¤ MUS 580 (1) ENSEMBLES (Grading: COM, N or F) Y(0-4)

¤¤ MUS 581 (1) CHAMBER MUSIC Y(0-3)

¤ MUS 590 (1½ or 3) DIRECTED STUDIES

MUS 596 (3) LECTURE-RECITAL
A lecture-recital of substantial duration, its topic likely related to the student's thesis. For students in the M.A. program in musicology with performance.

MUS 597 (6) M.MUS. GRADUATING COMPOSITION(S)
(Grading: INP, INC, COM or F)

MUS 598 (0) M.MUS. PRACTICUM
Degree recital required for performance candidates in final year. (Grading: INC, COM, N or F)

MUS 599 M.A. THESIS (Grading: INP, COM, N or F)

¤ MUS 690 (1½ or 3) DIRECTED STUDIES

MUS 699 PH.D. DISSERTATION (Grading: INP, COM, N or F)

** All students in musicology must register for this course each year they are in attendance.

¤ May be taken more than once at the discretion of the School.

¤¤ Performance candidates must register for both of these courses in each year of study. Candidates for the M.A. degree in musicology with performance must register in one of these courses in each year of study; they will be assigned either to 580 or 581, depending upon the students' needs and the needs of the School.

Credit to be determined.

PHILOSOPHY

(Not offered 1991-92)

The Department of Philsophy offers a two year program of graduate study leading to the degree of Master of Arts. At present this program is restricted to Contemporary Social and Political Thought. This is an interdisciplinary program for students in Philosophy, Political Science, or Sociology. It involves study of ideas and thinkers who are crucial to contemporary social and political thought, and who often defy disciplinary boundaries. The focal point of the program is an interdisciplinary seminar (CSPT 500) which involves the participation of members from the three departments.

To complete the program in philosophy, a student must:

(1) complete at least 9 units of course work, including
  (a) at least 3 units of CSPT 500;
  (b) PHIL 501A (1½) and 501B (1½) Issues in Social and Political Philosophy, and
  (c) another 3 units of course work which may be made up by some combination of further work in CSPT 500, Directed Studies (PHIL 590), and approved senior undergraduate courses.
(2) Write a thesis of 9 unit value.

The requirements for the program in the departments of Political Science and Sociology differ from those in Philosophy, and will be found under the calendar entries for those departments.

Admission to M.A. study in philosophy under the above program is restricted to students with a strong undergraduate degree in philosophy.

Faculty

Rodger G. Beehler, Ph.D. (Calgary)	Moral, legal, and political philosophy, philosophy of education.
Charles B. Daniels, D. Phil. (Oxford)	Philosophy of mind, ethics, aesthetics, ontology
Alan R. Drengson, Ph.D. (Oregon)	The British Empiricists, Kant, Eastern philosophy, moral psychology, philosophy and the environment
Jeffrey E. Foss, Ph.D. (Western Ontario)	Philosophy of science, philosophy of language, philosophical psychology
Eike-Henner W. Kluge, Ph.D. (Michigan)	Medical ethics, medieval philosophy, metaphysics, theory of perception
Monika Langer, Ph.D. (Toronto)	European philosophy, existentialism, history of philosophy and social/political issues
John M. Michelsen, Ph.D. (Washington)	Greek philosophy, European philosophy since Kant, moral philosophy
Charles G. Morgan, (Ph.D) (Johns Hopkins)	Philosophy of science, logic
James O. Young, Ph.D. (Boston)	Philosophy of language, aesthetics and metaphysics

GRADUATE COURSES

(Not offered 1991-92)

PHILOSOPHY

PHIL 500 (3) PROBLEMS IN PHILOSOPHY

PHIL 501A (1½) ISSUES IN SOCIAL AND POLITICAL PHILOSOPHY

PHIL 501B (1½) ISSUES IN SOCIAL AND POLITICAL PHILOSOPHY

PHIL 501T (3) HISTORY AND PHILOSOPHY OF SCIENCE
A study of some turning points in the history of science with particular attention to the conceptual issues underlying scientific theory and practice. (*Prerequisite:* Open only to teachers enrolled in the M.Ed. Program)

PHIL 590 (1½ or 3) DIRECTED STUDIES
(May be repeated for credit provided course content differs)

PHIL 599 (9) M.A. THESIS (Grading: INP, Com, N or F)

CONTEMPORARY SOCIAL AND POLITICAL THOUGHT

CSPT 500 (1½) CONTEMPORARY SOCIAL AND POLITICAL THOUGHT
An interdisciplinary seminar on topics such as language and social theory, tradition and modernity, democracy and freedom, global order and disorder, structuralism and post structuralism, feminism and Marxism. (Content will vary from term to term) (May be repeated for a maximum of 6 units of credit) (Open to M.A. or Ph.D. students in the Social Sciences and the Humanities with permission of the Director of the Program)

CSPT 590 (1½ or 3) DIRECTED READINGS
Individual study, under the direction of a participating faculty member, of a topic or topics in contemporary social and political thought. (A student in the Program may substitute PHIL 590, POLI 590 or SOCI 590 for CSPT 590, with permission of the Director of the program.) (May be repeated for credit, provided course content differs)

PHYSICS AND ASTRONOMY

The Department of Physics and Astronomy offers programs of study and research leading to the degrees of M.Sc. and Ph.D.

Close contact is maintained with the Defence Research Establishment Pacific, the Dominion Astrophysical Observatory, the Dominion Radio Astrophysical Observatory, the Pacific Geoscience Centre, and theInstitute of Ocean Sciences. The University of Victoria belongs to a consortium of universities which operates the meson facility TRIUMF.

The Climenhaga Observatory is an integral part of the Department, and major equipment associated with the Observatory includes an image processing system, a 0.5 metre telescope, an iris photometer, a microdensitometer, and a laboratory spectrograph.

Cooperative Education Program

The Department participates in the Cooperative Education Program in the Faculty of Graduate Studies and by individual arrangement Physics graduate students may participate in a Cooperative Education program as described in the Faculty of Graduate Studies section of this calendar.

Further information may be obtained from the Chair of the Physics and Astronomy Department Graduate Committee.

Astronomy and Astrophysics

Observational and theoretical studies, which may be carried out in conjunction with the Dominion Astrophysical Observatory.

Condensed Matter Physics

NMR studies of molecular properties in solids and liquids.

Geophysics and Ocean Physics

Geomagnetic induction, space physics, paleomagnetism, seismology, tectonophysics, physical oceanography and ocean acoustics. Research may be carried out in association with the Pacific Geoscience Centre, the Institute of Ocean Sciences, and the Defence Research Establishment Pacific.

Nuclear and Particle Physics

Intermediate and high energy physics experiments using accelerators at TRIUMF, Brookhaven, SLAC or CERN. Particle physics detector development. Magnet design studies for the TRIUMF KAON facility. Theoretical studies of weak interactions and rare decays.

Physics of Fluids

Shock wave studies and plasma physics.

Theoretical Physics

General relativity, nuclear and particle physics.

Faculty and Major Areas of Research

Alan Astbury, Ph.D. (Liverpool)	Experimental nuclear and particle physics
George A. Beer, Ph.D. (Saskatchewan)	Experimental nuclear and particle physics
Douglas A. Bryman, Ph.D. (Virginia Polytechnic)	Experimental nuclear and particle physics
Ross Chapman, Ph.D. (British Columbia)	Ocean acoustics
Reginald M. Clements, Ph.D. (Saskatchewan)	Plasma studies
Fred. I. Cooperstock, Ph.D. (Brown)	General relativity and astrophysics
Trevor W. Dawson, Ph.D. (UVic)	Geophysics
John M. Dewey, Ph.D. (London)	Experimental gas dynamics
Harry W. Dosso, Ph.D. (British Columbia)	Geomagnetism
David M. Farmer, Ph.D. (British Columbia)	Ocean acoustics
Harold W. Fearing, Ph.D. Stanford	Medium energy and particle physics
Ann C. Gower, Ph.D. (Cambridge)	Astronomy and astrophysics
F. David A. Hartwick, Ph.D. (Toronto)	Astronomy and astrophysics
James E. Hesser, Ph.D. (Princeton)	Astronomy and astrophysics
Robert E. Horita, Ph.D. (British Columbia)	Geomagnetism and space physics
Roy D. Hyndman, Ph.D. (Australian National)	Geophysics
Edward Irving, Sc.D. (Cambridge)	Paleomagnetism
Richard K. Keeler, Ph.D. (British Columbia)	Experimental nuclear and particle physics
M. Lefebvre, Ph.D. (Cambridge)	Experimental and high energy physics
Donald E. Lobb, Ph.D. (Saskatchewan)	Beam transport systems and magnetic studies
Glen M. Marshall, Ph.D. (Brit. Col.)	Particle physics
Grenville R. Mason, Ph.D. (Alberta)	Experimental nuclear and particle physics
Janis A. McKenna, Ph.D. (Toronto)	Experimental and nuclear particle physics
Arthur Olin, Ph.D. (Harvard)	Experimental nuclear and particle physics
Charles E. Picciotto, Ph.D. (California)	Theoretical nuclear and particle physics
Dale M. Pitman, Ph.D. (Toronto)	Experimental and high energy physics
Christopher J. Pritchet, Ph.D. (Toronto)	Astronomy and astrophysics
Lyle P. Robertson, Ph.D. (British Columbia)	Experimental nuclear and particle physics
Garry C. Rogers, Ph.D. (British Columbia)	Seismology
Harbhajan S. Sandhu, Ph.D. (British Columbia)	Nuclear magnetic resonance in solids and liquids
Colin D. Scarfe, Ph.D. (Cambridge)	Astronomy and astrophysics
George D. Spence, Ph.D. (British Columbia)	Seismology
Robert W. Stewart, Ph.D (Cambridge)	Physical oceanography
Jeremy B. Tatum, Ph.D. (London)	Astronomy and astrophysics
Sydney Van den Bergh, Ph.D. (Göttingen)	Astronomy and astrophysics
Don A. VandenBerg, Ph.D. (Australian National University)	Astronomy and astrophysics
Arthur Watton, Ph.D. (McMaster)	Nuclear magnetic resonance in solids and liquids
John T. Weaver, Ph.D. (Saskatchewan)	Geomagnetism

PHYSICS GRADUATE COURSES

Students should consult the Department concerning the courses offered in any particular year.

PHYS 500 (3) QUANTUM MECHANICS

PHYS 501 (3) NUCLEAR PHYSICS

PHYS 502 (3) ELECTROMAGNETIC THEORY

PHYS 503 (3) THEORY OF RELATIVITY

PHYS 504 (3) ATOMIC AND MOLECULAR SPECTROSCOPY

PHYS 505 (3) ADVANCED CLASSICAL MECHANICS

PHYS 506A (1½) PARTICLE PHYSICS: I

PHYS 506B (1½) PARTICLE PHYSICS: II

PHYS 510 (3) ADVANCED METHODS IN MATHEMATICAL PHYSICS

PHYS 511 (3) APPLIED TOPICS IN NUCLEAR PHYSICS

PHYS 512 (3) UPPER ATMOSPHERE PHYSICS

PHYS 514 (3) GAS DYNAMICS

PHYS 515 (3) GEOMAGNETISM AND SOLAR-TERRESTRIAL RELATIONSHIPS

PHYS 517 (3) NUCLEAR MAGNETIC RESONANCE

PHYS 518 (3) PLASMA PHYSICS

PHYS 519A (EOS 519A) (1½) SELECTED TOPICS IN GEOPHYSICS: I
(May be taken more than once for credit)

PHYS 519B (EOS 519B) (1½) SELECTED TOPICS IN GEOPHYSICS: II
(May be taken more than once for credit)

PHYS 521 (3) INTERMEDIATE ENERGY PHYSICS

PHYS 560 (0) SEMINAR (Grading: INP, COM, N or F)

PHYS 580 (1-3) DIRECTED STUDIES
(May be taken more than once for credit)

PHYS 599 (credit to be determined but normally in this Department 6 units) M.SC. THESIS (Grading: INP, COM, N or F)

PHYS 600 (3) ADVANCED QUANTUM MECHANICS

PHYS 699 (credit to be determined) PH.D. DISSERTATION (Grading: INP, COM, N or F)

The thesis or dissertation requirement for advanced degrees (599 or 699) applies to all students in the Department, both Physics and Astronomy.

ASTRONOMY GRADUATE COURSES

Students should consult the Department concerning the courses offered in any particular year.

500-511 offered as A or B.

ASTR 500 (1½ or 3) STELLAR ATMOSPHERES

ASTR 501 (1½ or 3) STELLAR STRUCTURE AND EVOLUTION

ASTR 502 (1½ or 3) BINARY AND VARIABLE STARS

ASTR 503 (1½ or 3) THE INTERSTELLAR MEDIUM

ASTR 504 (1½ or 3) GALACTIC STRUCTURE

ASTR 505 (1½ or 3) GALAXIES

ASTR 511 (1½ or 3) ADVANCED TOPICS IN ASTRONOMY
(May be taken more than once for credit)

ASTR 560 (0) SEMINAR (Grading: INP, COM, N or F)

ASTR 580 (1-3) DIRECTED STUDIES
(May be taken more than once for credit)

The thesis requirement for advanced degrees (PHYS 599 or 699) applies to all students in the Department, both Physics and Astronomy.

POLITICAL SCIENCE

The Department of Political Science offers courses of study leading to the degree of Master of Arts. Candidates are required to complete 15 units, in accordance with the following program:

1. Required courses: All M.A. students are required to take the two core courses in Problems of Political Analysis (Political Science 505) and Approaches to Political Analysis (Political Science 506) in the first year of their program except that students enrolled in the Legislative Internship Program may complete 506 in their second year.
2. Optional courses: Regular M.A. students are required to complete 6 additional units of course work. Up to a total of 3 of these units may be taken either from undergraduate courses at the 300 or 400 level, directed reading courses (590) or from graduate courses offered by another Department. Students enrolled in the Legislative Internship Program may not include undergraduate courses for credit in their 15 unit requirement.
3. Legislative Internship Program: Students who have been accepted as M.A. candidates in this Department and who subsequently participate in the British Columbia Legislative Internship Program may obtain 3 units of credit upon completion of a comprehensive intern research report (580) for submission to an examination committee made up of two members of the Department.
4. Thesis: All students are required to submit a thesis worth 6 units of credit.
5. Length of program: Full time students will normally be expected to complete the M.A. degree within 24 months of their first registration.
6. Admission: The program is open to students with at least a B+ (6.00) average in their last two years of study leading to a degree.

Applicants with insufficient preparation in political science may be required to complete additional course work. Normally this will entail a non-degree undergraduate unclassified year.

M.A. (Interdisciplinary) in Contemporary Social and Political Thought (CSPT):

This program is open to selected students in Political Science, Philosophy and Sociology. Students must meet the core graduating requirements of the individual departments.

The Graduate Adviser in each department should be consulted for details. To complete the CSPT program in Political Science a student must complete the 15 units of requirements for an M.A. in Political Science (including a thesis for POLI 599 in the field of CSPT), plus at least 3 units of CSPT 500. The calendar entry under the Department of Philosophy on page 243 should also be consulted for descriptions of CSPT 500 and 590.

Admission to the program in CSPT is subject to the written approval of the Program Director. Applicants must already have been accepted for the MA program in Political Science.

The requirements for the program in the departments of Philosophy and Sociology differ from those in Political Science.

Faculty and Current Research Interests

Robert E. Bedeski, Ph.D. (California, Berkeley)	East Asia (China, Japan, Korea) — comparative politics, foreign policy, and political thought; theories of revolution, development, and the state
Colin J. Bennett, Ph.D. (Illinois)	Comparative politics and public policy (advanced industrial countries); American government and politics; information and communications policy
Ronald I. Cheffins, Q.C., LL.M. (Yale)	The Canadian constitution and legal system; Canadian government and politics, with special reference to the judiciary, the executive, and federalism
Warren Magnusson, D.Phil. (Oxford)	Contemporary social and political thought; urban and local politics; social movements; theories of the state
Bruce Milne, Ph.D. (Toronto)	Public policy and administration in British Columbia; the politics of organization and administration; politics of langauge and cultural practice
J. Terence Morley, Ph.D. (Queen's)	Legal and Judicial Process: Canadian parties and pressure groups; the law and conventions of the Canadian constitution
Richard J. Powers, Ph.D. (Claremont)	International politics and international relations theory; international law and international organization; comparative foreign policy
Norman J. Ruff, Ph.D. (McGill)	B.C. provincial politics and public policy; federalism; comparative electoral systems
Katherine Teghtsoonian, Ph.D. (Stanford)	Comparative politics (industrialized western democracies); women and politics; politics of territory and ethnicity; comparative public policy
Robert B.J. Walker, Ph.D. (Queen's)	Contemporary political and social thought; theories of ideology and culture; philosophy of social science; international political theory; concepts of space and time in political thought
Michael C. Webb, Ph.D. (Stanford)	International political economy; international relations theory; North-South relations; Canadian foreign policy; American foreign policy
R. Jeremy Wilson, Ph.D. (British Columbia)	British Columbia politics and government; environmental and natural resources policy; elections and public opinion

GRADUATE COURSES

Courses marked with an asterisk (*) will be offered on a rotating basis

subject to enrolment and the availability of faculty.

POLI 505 (1½) PROBLEMS OF POLITICAL ANALYSIS
An examination of theoretical viewpoints in the study of politics.

POLI 506 (1½) APPROACHES TO POLITICAL ANALYSIS
A review of the major traditions of political analysis.

*** POLI 507 (1½) PUBLIC POLICY**
*** POLI 508 (1½) COMPARATIVE POLITICS**
*** POLI 509 (1½) POLITICAL THEORY**
*** POLI 516 (1½) CANADIAN POLITICS**
POLI 540 (1½) INTERNATIONAL RELATIONS
POLI 580 (3) LEGISLATIVE INTERNSHIP REPORT (Grading: INP, COM, N or F)

*** POLI 590 (1½ or 3) DIRECTED READINGS**
590A and 590B — Political Theory
590C and 590D — Comparative Politics
590E and 590F — Public Law
590G and 590H — Contemporary Political Analysis
590J and 590K — International Relations
590L and 590M — Public Administration
590N and 590P — Canadian Federal and Provincial Politics
(May be repeated for credit, provided course content differs, to a maximum of 3 units)

POLI 599 (6) THESIS (Grading: INP, COM, N or F)

PSYCHOLOGY

The Department of Psychology offers programs leading to the degrees of Master of Arts, Master of Science, and Doctor of Philosophy. The results of the GRE "General" test are required for application for admission to the department. Students whose first language is not English should meet a TOEFL score requirement of 600 or above.

Training leading to the Ph.D. degree is offered in Lifespan Development and Aging, Human Neuropsychology, Behavioural Neuroscience, as well as various areas of Experimental Psychology and Social Psychology.

A structured clinical training program is offered to students in Human Neuropsychology. This training includes clinical and neuro-psychological assessment, intervention, and basic courses in neuropsychology, psychopathology and clinical psychology. Students not enrolled in neuropsychology will have access to clinical training only if enrolled in another Department program and if they are willing to take the full course of training in clinical neuropsychology or related clinical fields. In addition, Psychology 503 (Practicum in Clinical Psychology) and Psychology 603 (Advanced Clinical Practicum) as well as Psychology 606 (Internship) are required for clinical training.

Admission

An undergraduate degree in Psychology or its equivalent with at least a B+ average in the last two years leading to the degree is recommended. Applicants should have taken at least one course in applied statistics and courses in major areas of psychology such as learning/cognition, physiological/neuropsychology, and social/personality/abnormal psychology.

Graduate Record Examination: Applicants should provide scores from the aptitude portion (verbal, quantitative, and analytic) of the Graduate Record Examination (G.R.E.).

Personal Letter: Applicant must also provide a personal letter that: (a) identifies the primary area of specialization desired, (b) describes areas of research interest, (c) names at least two faculty members with whom the applicant wishes to work, (d) gives details of current activity (e.g. courses in progress), and (e) indicates whether financial support will be required.

Admission requires that a faculty supervisor has been found (see item (c) under Personal Letter in paragraph above).

Applicants intending to pursue clinical training must declare their intent at the time of application under "Field of Study". After acceptance into one of the Departmental programs, such applications will be reviewed by the admissions committee for clinical training based on (a) background, interest and experience, (b) competitiveness of transcripts with other applicants for clinical training, and (c) a personal interview focusing on interests and suitability for clinical training. Students admitted for clinical training will be reviewed annually, based on academic progress and clinical aptitude.

Program Requirements

Undergraduate Competence: Students with insufficient background will be asked to demonstrate competence in the areas listed above (under Admission Requirements) by the end of their first year of graduate studies.

Thesis: A thesis is a requirement of all degree programs.

In addition to the above requirements, and unit requirements set by the Faculty of Graduate Studies, students must satisfy a methodology requirement involving 400 and 500 level courses in statistics and methods, and, in the case of Master's students, participate in their first year in a Research Apprenticeship which is generally overseen by the student's supervisor. Other departmental requirements are specific to particular programs or supervisors. A Master's degree involves a minimum of one year of full time study, while the Ph.D involves a minimum of two additional years, at least one of which must be as a full time student.

Requests for information on graduate program and application procedures, as well as application forms for admission and financial support, may be obtained from the Faculty of Graduate Studies. Specific inquiries may be addressed to the Director of Graduate Admissions, Department of Psychology.

Faculty and Major Areas of Research

Loren Acker, Ph.D. (Calif., Los Angeles)	Child behavioural development; University teaching technologies and innovations; general behaviour analysis
Janet Beavin Bavelas, Ph.D. (Stanford)	Social interaction; verbal and nonverbal communication; methodology
Michael E. Corcoran, Ph.D. (McGill)	Neuropsychopharmacology; experimental epilepsy and neural plasticity
Louis D. Costa, Ph.D. (Columbia)	Human neuropsychology and clinical psychology
Roger A. Dixon, Ph.D. (Pennsylvania State University)	Life-span development and aging; cognitive psychology; reading and prose memory
Pam Duncan, Ph.D. (Wisconsin)	Clinical psychology/ sexual deviation
Nancy Galambos, Ph.D. (Pennsylvania State)	Adolescent development; parent-child relations; work and the family
Robert D. Gifford, Ph.D. (Simon Fraser)	Environmental; social-personality
Bram Goldwater, Ph.D. (Bowling Green)	Experimental and applied behaviour analysis; educational technology; human psychophysiology
Roger E. Graves, Ph.D. (Massachusetts Institute of Technology)	Human neuropsychology: clinical and experimental
Ronald A. Hoppe, Ph.D. (Michigan State)	Language and social psychology

David F. Hultsch, Ph.D. (Syracuse)	Adult development and aging; memory and cognition
Michael A. Hunter, Ph.D. (Simon Fraser)	Developmental psychology; statistics and research design
Michael Joschko, Ph.D. (Windsor)	Human neuropsychology, clinical child psychology
Michael E.J. Masson, Ph.D. (Colorado)	Cognitive psychology; memory, language comprehension, skill acquisition and univariate statistics
Richard B. May, Ph.D. (Claremont)	Learning; memory; cognitive development
Clare K. Porac, Ph.D. (New School for Social Research)	Visual perception; lateral preferences; handedness
Lorne Rosenblood, Ph.D. (Ohio State)	Attitude theories; social affiliation; research design
Ronald W. Skelton, Ph.D. (British Columbia)	Neurophysiology, learning and memory
Frank Spellacy, Ph.D. (Victoria)	Human neuropsychology; developmental and language disorders; auditory perception
Otfried Spreen, Ph.D. (Freiburg)	Human neuropsychology; developmental and language disorders; auditory perception
Esther H. Strauss, Ph.D. (Toronto)	Neuropsychology; developmental psychology
Charles Tolman, Ph.D. (Washington)	Experimental psychology; history, theory, and methods

GRADUATE COURSES

Students must consult the Department concerning courses offered in any year.

PSYC 502 (1-4½) RESEARCH APPRENTICESHIP

PSYC 503 (1-6) PRACTICUM IN CLINICAL PSYCHOLOGY
Practicum in a clinical setting. 1 unit of credit equals approximately 100 hours. (Grading: INP, COM, N or F)

PSYC 504 (1½-6) INDIVIDUAL STUDY
(May be taken more than once provided course content differs.) (The student must consult with the instructor about the area of study prior to registration. A maximum of 6 units of 504 may be taken in any one Winter Session at the discretion of the student's Supervisory Committee.)

Courses 507 to 531 inclusive may be taken more than once, provided course content differs, to a maximum of 6 units at the discretion of the student's Supervisory Committee. Each area carries 1½ units of credit. The specific content area will be designated prior to registration.

PSYC 507 (1½) PERSONALITY

PSYC 508 (1½) MOTIVATION

PSYC 509 (formerly 509/510) (1½) HISTORY AND SYSTEMS OF PSYCHOLOGY
Survey of selected theoretical systems as they have developed in the history of psychology.
C. Tolman

PSYC 510 (1½) THEORIES OF PSYCHOLOGY

PSYC 517 (1½) RESEARCH METHODS IN PSYCHOLOGY

PSYC 518 (1½) PSYCHOMETRIC METHODS

PSYC 519 (1½) SOCIAL PSYCHOLOGY

PSYC 526 (1½) SOCIAL PROCESSES

PSYC 527 (1½) SOCIAL DESIGN

PSYC 531 (1½) ENVIRONMENTAL PSYCHOLOGY

PSYC 540 (formerly 515A) (1½) HUMAN NEUROPSYCHOLOGY: BASIC TOPICS
Survey of major topics and issues in clinical and experimental neuropsychology, including a historical introduction, and recent material. Topics may include aphasia, agnosia, apraxia, agraphia, other clinical syndromes, hemispheric specialization, etc.

PSYC 541 (formerly 541/544) (1½) RESEARCH DESIGN AND METHODS IN NEUROPSYCHOLOGY
Seminar on current research methodologies including presentation of actual research by students, faculty, and visiting scientists. Students develop and write original research proposals using standard journal format.
R.E. Graves

PSYC 542 (formerly 520B) (1½) DEVELOPMENTAL NEUROPSYCHOLOGY
Survey of early life neural development, disorders of development and their consequences, and disturbances of neurobehavioral function in infancy, childhood and in long term follow up. Special emphasis will be on specific conditions, e.g. prematurity, anoa, head injury, and specific syndromes, e.g. epilepsy, language and learning disorders, etc.

PSYC 543 (formerly 535B) (1½) HUMAN NEUROANATOMY
Introduction to neuroanatomy, focussing on the brain, and including laboratory work.

PSYC 545 (formerly 524C) (3) NEUROPSYCHOLOGICAL ASSESSMENT
Survey of specific areas and techniques of neuropsychological assessment including interviewing, test administration, case formulation, and report writing. Students must conduct, under staff supervision, detailed neuropsychological assessment of clinical cases. (*Prerequisites:* 540, 584 and 585)
F. Spellacy, E. Strauss

PSYC 546 (formerly 624A) (3) ADVANCED NEUROPSYCHOLOGICAL ASSESSMENT
Survey of specific areas and techniques of assessment and interviewing, consultation and report writing, including 10 supervised case studies. (*Prerequisites:* 545 and admission to the Ph.D. program in clinical neuropsychology)
O. Spreen, M. Joschko

PSYC 547 (formerly 535D) (1½) REHABILITATION IN NEUROPSYCHOLOGY
Introduction to theory and techniques associated with recovery from brain injury. Topics include the psychological meaning of disability, and the relationship between impairment, disability, and handicap. Current techniques in cognitive rehabilitation will be reviewed in the broader context of rehabilitation in general. May include practicum in various rehabilitation settings. (*Prerequisite:* Admission for clinical training)
F. Spellacy

PSYC 548 (formerly 515D) (1½) SPECIAL TOPICS IN NEUROPSYCHOLOGY
(May be taken more than once up to a maximum of 6 units provided course content differs)

PSYC 550 (formerly 512A) (1½) PHYSIOLOGICAL PSYCHOLOGY: INTRODUCTION
Seminar discussing selected topics concerning fundamental neurobiological processes underlying behavior, including synaptic transmission, motor and sensory activity, motivation, neural plasticity, and theories of neural organization.

PSYC 551 (formerly 532D) (1½) NEUROPSYCHOPHARMACOLOGY
Seminar discussing the neurochemical bases of brain function and of the effects of psychoactive drugs, with emphasis on the role played by chemical neurotransmitters and the system of neurons that release them.

PSYC 552 (formerly 512D) (1½) SPECIAL TOPICS IN PHYSIOLOGICAL PSYCHOLOGY
(May be taken more than once up to a maximum of 6 units provided course content differs)

PSYC 560 (formerly 560A) (1½) CONCEPTS AND THEORIES OF DEVELOPMENTAL PSYCHOLOGY
Seminar review of the major models and theories of psychological development across the life span. Discussion focuses on differences among the models and theories on central issues such as concepts of change and development, nature-nurture, and individual-environment interactions.

PSYC 561 (formerly 560B) (1½) RESEARCH METHODS IN DEVELOPMENT PSYCHOLOGY
Seminar review of research designs for the study of psychological development across the life span. Specific topics include cross-sectional, longitudinal, sequential, and experimental approaches. In addition, issues related to sampling and measurement are considered.

PSYC 562 (formerly 560C) (1½) INFANCY AND CHILDHOOD
Seminar review of theory and research examining psychological development from infancy through childhood. Special topics include personality/temperament, attachment, parent-child relations, and socialization process. Emphasis is placed on the role of the context in individual development.

PSYC 563 (formerly 560D) (1½) ADULT DEVELOPMENT AND AGING
Seminar review of theory and research examining psychological processes during adulthood and aging. Specific topics include memory, intelligence, problem solving, personality, social processes, and mental health. Attention is also given to the biological and sociocultural contexts of these developments.

PSYC 564 (formerly 561A) (1½) STATISTICAL METHODS IN DEVELOPMENTAL PSYCHOLOGY
Examination of statistical methods for the analysis of change. Specific topics include change scores, cannonical correlation, multivariate analysis of variance, and factor analysis. (*Prerequisite:* 400A, 400B, and 561)

PSYC 565 (formerly 561B) (1½) COGNITIVE DEVELOPMENT IN ADULTHOOD AND AGING
Seminar review of theory and research examining gains and losses in various cognitive skills from young adulthood to old age. Traditional experimental, psychometric, and cognitive science approaches are considered. Specific topics include age-related change in memory, intelligence, problem solving, reading skills, and as well as practical and social cognition.

PSYC 566 (formerly 561C) (1½) PERSONALITY AND ADJUSTMENT IN ADULTHOOD AND AGING
Seminar review of theory and research examining personality change, stress, coping, and adjustment across the adult life span. Specific topics include the cases for and against personality change, personality as a mediator of other behavior, stress, coping, life events, and mental health in adulthood.

PSYC 567 (1½) DYSFUNCTIONAL DEVELOPMENT IN ADULTHOOD AND AGING
Seminar review of theory and research examining dysfunctional and pathological processes in later life. Specific topics include dementia, depression, personality disorders, alcoholism and other addictions, and suicide. Attention will be given to issues of etiology, diagnosis, treatment, and impact on caregivers.

PSYC 569 (formerly 562) (1½) SPECIAL TOPICS IN LIFESPAN DEVELOPMENT
Topical seminars on specialized issues related to lifespan development and aging. (May be taken more than once up to a maximum of 6 units provided course content differs)

PSYC 570 (LING 570) (1½ or 3) PSYCHOLINGUISTICS
A seminar offered in collaboration with the Department of Linguistics. Selected topics of interest in understanding the comprehension and production of natural language are examined. The most recent topics have been sentence processing, discourse analysis, linguistic inference and the resolution of ambiguity, and the development of cognitive science interests in reasoning and discourse processes as well as the structure of mental representations.
R.A. Hoppe, J.F. Kess

PSYC 571 (LING 571) (1½ or 3) DEVELOPMENTAL PSYCHOLINGUISTICS
A seminar offered in collaboration with the Department of Linguistics. Selected topics of interest in understanding the acquisition of the child's first language in the areas of phonological and grammatical abilities, as well as the child's knowledge of semantic systems and discourse rules. Recent topics have been the development of conversational abilities in children, including turn taking, questioning and answering, and politeness and negotiation in speech acts.
R.A. Hoppe, J.F. Kess

PSYC 575 (formerly 506) (1½) COGNITIVE PSYCHOLOGY
Seminar of major topics in cognitive psychology, including pattern recognition, attention, memory categorization, language processing, problem solving, and decision making. Emphasis will be on current theories and methodologies.

PSYC 576 (1½) MEMORY AND COGNITIVE PROCESSES
Exploration of current theories and research involving memory and cognitive processes. Emphas will be on the relationship between empirical research and theory construction. Examples of formal theoretical models and modelling techniques will be discussed.
S. Lindsay

PSYC 580 (formerly 528) (3.0) CLINICAL PSYCHOLOGY AND PSYCHOPATHOLOGY
Overview of various concepts, methods, and professional issues in clinical psychology. Includes a review of the scientist-practitioner role as it has developed, a presentation of various mental disorders based on descriptive, experimental, and theoretical psychopathology, discussion of psychodiagnostic issues emphasizing the impact of gender and culture in the expression of "abnormal" bahavior throughout the lifespan.
M. Ehrenberg

PSYC 582 (formerly 525) (1½) LEARNING DISORDERS
Discussion of the history and current theories of learning disorders with special emphasis on subtype analysis, neuropsychological deficits, and specific forms of remediation.

PSYC 583 (formerly 535C) (1½) PROFESSIONAL AND ETHICAL ISSUES IN CLINICAL PSYCHOLOGY
Discussion of ethical standards for providers of psychological services and of registration requirements as required by BCPA, CPA, and APA. Includes also presentations by practicing psychologists in various specialties and of various professional and interprofessional problems encountered by the practicing psychologist.

PSYC 584 (formerly 524A) (1½) CLINICAL ASSESSMENT
Introduction to intellectual assessment with practicum.
P. Duncan

PSYC 585 (formerly 524B) (1½) CLINICAL ASSESSMENT
Introduction to techniques of personality assessment with emphasis on projective techniques. Includes practicum. (*Prerequisite:* PSYC 584 and admission to clinical training)
P. Duncan

PSYC 586 (formerly 624B) (1½) ADVANCED CLINICAL ASSESSMENT
Advanced techniques and interpretation of clinical assessment devices with supervised case studies. (*Prerequisites:* 585 and admission to clinical training)

PSYC 587 (formerly 550) (1½) APPLIED BEHAVIORAL ANALYSIS
This course covers basic theory and principles of behavioral psychology. Principles of behavioral development and analysis, as drawn from the literature in the experimental analysis of behavior (basic research) will be related to the literature in Applied Behavior Analysis, including behavior modification. In some years, a practicum may be included.

PSYC 588 (formerly 516) (1½) CHILD PSYCHOTHERAPY
Introduction to different theoretical approaches to child psychotherapy and a discussion of techniques; supervised experience will be offered in subsequent sections. (May be taken more than once up to a maximum of 4½ units provided course content differs)

PSYC 589 (formerly 516) (1½) ADULT PSYCHOTHERAPY
Introduction to different theoretical approaches in adult psychotherapy and a discussion of techniques; supervised experience will be offered in subsequent seminars (591). May be taken more than once to a maximum of 4½ units provided course content differs.
M. Runtz

PSYC 591 (formerly 628) (1½) SPECIAL TOPICS IN CLINICAL PSYCHOLOGY
(May be taken more than once up to a maximum of 6 units provided course content differs)

PSYC 592 (formerly 528D) (1½) HYPNOTHERAPY
Introduction to the clinical use of hypnosis. Topics include: hypnotic inductions, trance utilization, ideomotor responses, and use of language in hypnosis. Strategies for treatment of specific clinical problems will be examined.

PSYC 599 (3-6) THESIS (Grading: INP, COM, N or F)

PSYC 602 (1-6) INDEPENDENT RESEARCH

PSYC 603 (3-6) ADVANCED CLINICAL PRACTICUM
Practicum for a minimum of 400 hours in an approved clinical setting (1 unit of credit equals approximately 100 hours) (*Prerequisite:* Admission to clinical training and approval of committee on clinical training)
(Grading: INP, COM, N or F)

PSYC 604 (1½-6) INDIVIDUAL STUDY
(May be taken more than once provided course content differs.) (The student must consult with the instructor about the area of study prior to registration. A maximum of 6 units of 604 may be taken in any one Winter Session at the discretion of the student's Supervisory Committee.)

PSYC 605 (1½ or 3) PRACTICUM IN THE TEACHING OF PSYCHOLOGY
Teaching practicum with individual instructors of the department in areas of potential teaching interest for the student.
(Grading: INC, COM, N or F)

PSYC 606 (15) CLINICAL INTERNSHIP
Full-year internship with 1600 to 2000 hours of supervised practical experience in settings approved by the committee on clinical training. (*Prerequisite:* Completion of clinical course sequence and approval by Committee on clinical training)

PSYC 699 (3-15) Ph.D. DISSERTATION
(Grading: INP, COM, N or F)

PUBLIC ADMINISTRATION

MASTER OF PUBLIC ADMINISTRATION PROGRAM

The School of Public Administration offers both full time and part time programs of studies leading to the degree of Master of Public Administration (M.P.A.). The multidisciplinary program is intended for practising or prospective manager who wish to acquire, or update, the skills necessary for effective and responsible public sector management and policy analysis.

Admission

Candidates will have a four year baccalaureate degree from a recognized university, or equivalent qualifications, with an academic standing acceptable to the School and the Faculty of Graduate Studies. In general, this would mean a very high second class standing or better in the final two years of the undergraduate degree. In exceptional cases the School, with the agreement of the Dean of the Faculty of Graduate Studies, may waive this requirement on the presentation of other evidence, such as substantial professional experience, which indicates that the candidate will complete the program successfully.

Because the M.P.A. program is open to students from a broad range of disciplines, the School anticipates applications from persons with widely varied undergraduate backgrounds. Although there is no formal requirement with respect to the specific nature of undergraduate courses, makeup course work may be required where lack of an adequate background is judged to be a handicap for the student.

A grade of 'B' or better within the past 10 years is required in Economics 201 or equivalent; challenge exams are offered by the School to those admitted without sufficient relevant documentation.

If the candidate has neither passed the course nor the challenge examinations, Economics 201, or equivalent, must be taken during a prescribed period; but it cannot be counted for credit toward the M.P.A. degree.

Applicants are encouraged to submit whatever other evidence of suitability for admission they feel is relevant. This could include the Graduate Management Admission Test, the Graduate Record Examination, academic records from nondegree courses, a professional résumé and TOEFL (for students whose first language is not English).

A supplementary page should be used to describe the relevance of prior work experience and the reason for seeking an M.P.A. degree. Often an interview is arranged with the Graduate Adviser or designate.

Students completing an undergraduate degree in preparation for entry to the M.P.A. program, or otherwise taking upper level undergraduate courses to strengthen their application, are urged to consult the School for advice concerning an appropriate program of study.

Please note: For admission in September, the application deadline is May 1; for January admission, the application deadline is October 15.

Please note: Effective September, 1992, all applicants who do not possess a Canadian Baccalaureate Degree, will be required to write and submit results for either the Graduate Management Admissions Test or the Graduate Record Examination.

PROGRAM OF STUDIES

Upon admission, each student will meet with the Graduate Adviser or designate to establish a program of study to meet the M.P.A. degree requirements. After being approved by the Dean of Graduate Studies, this study plan provides the basis for granting the degree, following satisfactory completion of the courses within the stipulated time limit.

The regular degree program consists of 30 units, including 13½ units of foundation courses numbered 500-516, 10½ units of electives numbered 521 and above, followed by 519, 520 and 598 (6 units). Entering students who possess a directly relevant academic background or who pass an appropriate challenge exam or who possess appropriate senior administrative experience may be granted advanced standing in designated courses numbered 500 to 516. Individual programs of study may differ widely, but in no case will the M.P.A. degree be awarded on the basis of fewer than 18 units of study (including the report requirement) accepted for graduate credit at the University of Victoria.

A full time student with little relevant academic or work experience, who is not involved in the Cooperative Education option, will normally need 20 months to complete the requirements for the degree. One who is extremely well prepared academically or has substantial relevant work experience may require only 12 months of full time study. The program also may be undertaken on a part time basis. Transfer to full time status, and vice versa, is automatically available after the first term of study in the M.P.A. program.

The Report Requirement (Administration 598):

The report is expected to be a substantial analysis of a significant policy issue or management problem. It is to be prepared individually by the student in consultation with an adviser, who shall be a member

of the School faculty. The adviser will review the first draft, and approve a final version for submission to the Oral Examination Committee which will include the adviser, another member of the School faculty, a member of the Faculty of Graduate Studies from outside the School, and at least one professional administrator.

Concurrent LL.B./M.P.A. Program

Students who apply and are accepted into both the Faculty of Law's LL.B. program and the School of Public Administration's M.P.A. program may earn both degrees simultaneously with modified requirements for each. The M.P.A. requirements for the combined degree program include completing or receiving advanced standing in ADMN 500, 502A, 502B, 503, 507 and 512; plus 7½ units of electives numbered ADMN 522 or higher; plus ADMN 519, 520 and 598. Regardless of how much advanced standing is granted, the minimum requirements are the same as for the regular M.P.A. program: at least 18 units, of which 12 units must be from courses numbered ADMN 519 and above.

Normally, the combined degree program will require four regular academic years to complete. The first year is devoted entirely to the required first year Law curriculum. During the second year, students will complete 6 units of required second year Law courses plus the Public Administration foundation courses (ADMN 500, 502A, 502B, 503, 507 and 512). The third and fourth years are used to complete LL.B. and M.P.A. elective courses, The Public Law Term, and ADMN 519, 520 and 598.

Students may reduce the time in the program by enrolling in some M.P.A. courses during the Summer Term. Alternatively, students may gain valuable work experience by entering the Cooperative Education option (see below). The three coop work terms are scheduled in consultation with the School's Graduate Adviser.

For information about the Faculty of Graduate Studies rules governing the combined LL.B./M.P.A. degree program, see 2.11 in the general regulations section for the Faculty. Further information on the program may be obtained from either the School of Public Administration or the Faculty of Law.

Performance Requirements:

See page 233, Academic Standards.

Cooperative Education:

The Cooperative Education option within the M.P.A. program provides an opportunity for Public Administration students to obtain relevant work experience while completing their degree requirements. Students who successfully complete three Work Terms and satisfy the academic requirements of the M.P.A. degree program offered by the School of Public Administration will receive a notation to this effect on their transcripts at graduation. Prior work experience is not accepted for work term credit.

Applications for admission to the Cooperative Program should be submitted not later than the end of the second week of the student's first term in the M.P.A. program. Decisions on admission are normally made by the fifth week of classes. The Cooperative Education option is only available to full time students; part time students may apply for admission on the understanding that they will be required to change to full time status for the remainder of their program.

Language Skills:

Students are strongly recommended to maintain or improve their fluency in French while in the program. A successful public service career in Canada is increasingly dependent on an ability to function in Canada's two official languages.

GRADUATE COURSES AND REQUIREMENTS

The program of studies leading to the M.P.A. degree has been arranged in four course blocks to facilitate learning and program planning.

Course Block 1 Foundation Courses
Course Block 2 Key Electives
Course Block 3 Other Elective Seminars
Course Block 4 Required Seminars and Management Report

Students are normally expected to complete all Block 1 courses before proceeding further as groupings of these courses are prerequisites for courses in Blocks 2, 3 and 4. Students are also encouraged to read carefully the detailed descriptions of courses in the upper blocks, to ensure that they have acquired the specific prerequisites for their desired program of study.

Course Block 1

500 Quantitative Analysis I
502A Research Methods: I
502B Research Methods: II
503 Economic Methods in Policy Analysis
504 Political Analysis
507 Management and Organizational Behaviour
510 Law and Administration
512 Introduction to Accounting and Financial Management in the Public Sector
516 Written Communications

Admn 500 through 516 have graduate course credit only for M.P.A. students

Course Block 2

These courses are offered on a regularly scheduled basis by the School of Public Administration. The following courses provide essential material for management and policy analysis.

524 Information Systems Management
531 Personnel Management
537 Program Evaluation
540 Public Sector Budgeting, Accounting and Financial Management
544 Cost Benefit Analysis
578 Advanced Methods of Analysis

Course Block 3

These courses are offered subject to student demand and faculty availability.

522 Seminar on Public Transportation Issues
523 Contemporary Topics in Administration
525 Labour Relations and Collective Bargaining
526 Information Technology and Management
527 Decision and Risk Analysis
528 Project Management
529 Organizational Development
530 Organizational Theory and Job Design
532 The Management of Change
533 Public Sector Marketing and Policy Implementation
535 Regulation and Competition Policy
539 Managing for Excellence in the Public Sector
541 Management Control, Auditing, Privacy and Security in the Public Sector
542 Cost Accounting in the Public Sector
543 Developmental Administration
545 Local Government Organization, Operation and Finance
546 Issues in Management of Local Government
547 Program Implementation
549 Processes and Problems in the Formation of Economic Policy
551 Administrative Law
552 Federalism and Federal-Provincial Relations in Canada
556 Machinery of Government
563 Aspects of Research Design
564 Seminar on Social Policy Issues
575 Coastal Resource Use, Law & Management
577 Strategic Planning Seminar

Course Block 4

These courses are required and should be taken near the end of the student's program.

519 Seminar in Responsible Administrative Behaviour
520 Management and Policy Seminar
598 Report Requirement

Faculty and Areas of Interest

Robert L. Bish, Ph.D. (Indiana)	Local government, coastal resource management, theories of public choice
Frank Cassidy, Ph.D. (Stanford)	Indian self government and land claims, public sector management, administrative ethics, adult education and public policy
Ronald I. Cheffins, Q.C., LL.M. (Yale)	Canadian Public Law, Canadian politics and government

J. Barton Cunningham, Ph.D. (Southern California)	Quality of working life, organizational theory, decision making, stress and motivation, entrepreneurship
James Cutt, Ph.D. (Toronto)	Public sector finance and accounting, evaluation of public policy
Ralph Huenemann, Ph.D. (Harvard)	Cost benefit analysis, development policy and administration, comparative economic systems, transportation economics, international trade policy
Thomas A. Lambe, Ph.D. (Stanford)	Application of quantitative methods, with particular regard to urban transportation systems
John Langford, Ph.D. (McGill)	Canadian politics and government, machinery of government, administrative ethics
James N. MacGregor, Ph.D. (Victoria)	Organizational behaviour, human information processing
James C. McDavid, Ph.D. (Indiana)	Urban administration, program evaluation, statistical methods
James J. McRae, Ph.D. (Western Ontario)	Economic analysis of public policy: regulation and competition policy; international trade and investment policy; transportation policy; taxation and income support policy
Michael J. Prince, Ph.D. (Exeter)	Social policy formulation and implementation, retirement income security, theories of the welfare state, administrative politics of policy analysis
Thomas K. Shoyama B.A., B. Comm, LL.D. (Brit. Col).	Federal Provincial Relations

GRADUATE COURSES

(Administration 500 through 516 have graduate course credit only for M.P.A. students. All seminars 522 and above are offered subject to enrollment and the availability of faculty; not all will be offered every year.)

ADMN 500 (1½) QUANTITATIVE ANALYSIS: I
Application of elementary mathematical methods for analyzing decisions under uncertainty. Includes concepts of sets, functional notation, probability theory, random variables, optimization, decision criteria spreadsheet and database. Emphasis on examples and applications drawn from the public sector.

ADMN 502A (1½) RESEARCH METHODS: I
An introduction to the range of skills necessary to conduct research in the public or private sectors. The course covers aspects of research design, data collection, and data analysis. Related statistical techniques are introduced including descriptive statistics, crosstabulation, and inferential statistics. Computer facilities are used to provide an introduction to the processing and analysis of research data.

ADMN 502B (formerly 501) (1½) RESEARCH METHODS: II
An intermediate level course in the design and analysis of applied research relevant to public sector issues. Research topics include experimental design, quasi-experimental design, field and evaluation research. Related statistical techniques and computer analysis are introduced, including analysis of variance, bivariate regression and multiple regression. (*Prerequisites:* 500 and 502A or equivalents)

ADMN 503 (1½) ECONOMIC METHODS IN POLICY ANALYSIS
A selective, accelerated review of micreconomic principles and modes of reasoning used by economists to analyze problems of resource allocation and the economic role of government in the economy. Issues in the general area of taxation, regulation, fiscal federalism, cost-benefit analysis, and social welfare programs will be investigated from an economic policy point of view. Entry into this course requires successful completion of Economics 201 or equivalent. (*Prerequisite:* 500) (NOTE: Credit will not be given for both 503 and ECON 302)

ADMN 504 (1½) POLITICAL ANALYSIS
An examination of the political and and governmental environment in which public administration takes place in Canada. The focus will be on those institutions and relationships most relevant to public administrators, including: the political executive, legislative, central agencies, ministries, regulatory agencies, crown corporations, interest groups, and the wider public. Municipal-level institutions will also be examined.

ADMN 507 (1½) MANAGEMENT AND ORGANIZATIONAL BEHAVIOUR
This course will consider the nature of managerial work; managerial skills for improving employee performance; the nature of authority and leadership; conflict; motivation; decision making; planning; control and structuring of organizational activity.

ADMN 510 (1½) LAW AND ADMINISTRATION
An examination of the legal framework for administration topics will include: the Constitutions of Canada and B.C., the Charter of Rights and Freedoms, the division of powers in a federal system, the Supremacy of Parliament, delegation of power, legislative drafting and interpretation, the role of the Courts, legal mechanisms for enforcement and remedy and administrative law. (*Prerequisite:* 504)

ADMN 512 (1½) INTRODUCTION TO ACCOUNTING AND FINANCIAL MANAGEMENT IN THE PUBLIC SECTOR
An introduction to financial and cost accounting in the public sector: the nature of financial statements, the classification of transactions and the derivation of financial statements, the analysis of financial statements, valuation theory and the alternatives to historical cost accounting, (*Prerequisite:* Algebra 12)

ADMN 516 (1½) WRITTEN COMMUNICATIONS
Advanced skills in written and oral presentation of material for public sector analysis and decision making. Preparation of briefing notes, discussion papers, Cabinet memoranda, Treasury Board submissions, interministry and intraministry correspondence, speeches, and press releases.

ADMN 519 (1½) SEMINAR IN RESPONSIBLE ADMINISTRATIVE BEHAVIOUR
This course examines ethical dilemmas faced by public servants in the course of exercising administrative discretion, making policy choices and delivering services. Issues such as political neutrality, conflict of interest, accountability, confidentiality and the protection of privacy will be featured. Different approaches to ethical reasoning will be introduced. The primary purpose is to provide each participant with the opportunity, first, to reflect on the values and rules to which he or she subscribes and, second, to develop a capacity for justifying difficult ethical choices. (*Prerequisites:* 500 through 516)

ADMN 520 (1½) MANAGEMENT AND POLICY SEMINAR
A seminar designed to apply the skills and knowledge acquired in the MPA program to practical questions of public policy analysis and management. (*Prerequisites:* 500 through 516)

ADMN 522 (1½) SEMINAR ON PUBLIC TRANSPORTATION ISSUES
This course investigates policy questions related to the technical, economic and political aspects of the major transportation systems in Canada.

ADMN 523 (1½) CONTEMPORARY TOPICS IN ADMINISTRATION
A study of selected topics drawn from the current literature in Public Administration or related fields. Students may be permitted to take Administration 523 more than once for credit, provided the course content is different from that previously taken.

ADMN 524 (1½) INFORMATION SYSTEMS MANAGEMENT
This course forcues on management and user issues. Topics will include

conceptual foundations, structure and technology of Management Information Systems, MIS administration, analysis, design, implementation and resource management. (*Prerequisite:* 507)

ADMN 525 (1½) LABOUR RELATIONS AND COLLECTIVE BARGAINING
Familiarization with the problems and procedures encountered in collective bargaining in the public sector. Among the topics covered are: management's rights, bargainable issues, dispute resolution, arbitration, behaviour in negotiation and contract administration. (*Prerequisite:* 510)

ADMN 526 (1½) INFORMATION TECHNOLOGY & MANAGEMENT
The purpose of the course is to provide students with a variety of exposures to office automation, and with the analytical skills necessary for the selection, design, implementation and evaluation of new office systems. The course will emphasize hands on experience with software related to management, including word processing, spreadsheet, database management and graphics programs. An introduction to programming in BASIC will be provided. (*Prerequisite:* 500)

ADMN 527 (1½) DECISION AND RISK ANALYSIS
Application of decision analysis within the public sector will be considered with particular regard to the use of elementary Bayesian and cardinal utility theory. Among topics to be included are: the representation of uncertainty in terms of probability, the use of data to reduce uncertainty, the characteristics of risk aversion, the value of information, and the use of sequential decisions in data gathering and analysis.

ADMN 528 (1½) PROJECT MANAGEMENT
The coordination of manpower and equipment to address problems of unexpected delays, running over budget, and meeting standards. Case studies with supporting theory are analyzed through class discussion and with the micro-computer.

ADMN 529 (1½) ORGANIZATIONAL DEVELOPMENT
An application of the action research approach to organizational development; workshops on conflict resolution, team building, sociotechnical design, survey feedback, process consultation. Attention will be paid to organizational diagnosis, organizational change and overcoming resistance to change. (*Prerequisite:* 507)

ADMN 530 (1½) ORGANIZATIONAL THEORY AND JOB DESIGN
The course will deal with organization and management theory, general systems theory; approaches to improving the quality of working life, job enrichment, job enhancement, industrial democracy, quality circles, alternative schedule arrangements. (*Prerequisite:* 507)

ADMN 531 (1½) HUMAN RESOURCE MANAGEMENT
This course will focus on human resource management, recruitment, selection, and training, individual and group motivation and behaviour, manpower utilization, assessment, and compensation systems, cooperation and conflict in labour management relations. (*Prerequisite:* 507)

ADMN 532 (1½) THE MANAGEMENT OF CHANGE
This course focuses on managing change in organizations, including strategies and principles of change and problems of power and conflict.

ADMN 533 (1½) PUBLIC SECTOR MARKETING AND POLICY IMPLEMENTATION
This course applies the main elements of the marketing process to public sector issues. Topics include: relationships amongst various publics; similarities and differences between public and private sector marketing; market research and segmentation; marketing mix and implementation.

ADMN 535 (1½) REGULATION AND COMPETITION POLICY
This course investigates Canada's use of competitive and regulatory instruments to govern the operation of important sectors of the economy. Emphasis will be on the economic policy aspects of competition and regulation, but sufficient understanding of the legal and institutional underpinnings will be developed. Case studies will come from the following areas: transportation, telecommunications, energy, forestry, fisheries, agriculture, occupational and product safety, and environmental pollution. (*Prerequisite:* 503, 504, 510)

ADMN 537 (1½) PROGRAM EVALUATION
This course focuses on the design and conduct of program evaluations. Emphasis is placed on the acquisition of skills necessary to model public sector programs, design appropriate evaluations of them, measure key variables, and collect and analyze information. Students are exposed to a range of actual evaluations and are expected to design a program evaluation by the end of the course. Experience with mainframe computers is required. (*Prerequisites:* 502A and 502B or their equivalents)

ADMN 539 (1½) MANAGING FOR EXCELLENCE IN THE PUBLIC SECTOR
This seminar analyses those attributes which lead to high performance and high morale in public and private sector organizations, and examines how public sector organizations transform themselves towards the "well-performing" paradigm. The content includes: current management theory; Japanese management techniques; the characteristics and performance of "excellent" private sector companies and "well-performing" public organizations; a comparison of private and public sector organizational environments and the application of Japanese and "excellence" techniques to public sector management.

ADMN 540 (1½) PUBLIC SECTOR BUDGETING, ACCOUNTING AND FINANCIAL MANAGEMENT
The application of financial budgeting, accounting and information systems concepts, practices, and techniques to financial management in public sector organizations. (*Prerequisite:* 512)

ADMN 541 (1½) BUDGETING, CONTROL AND AUDITING IN THE PUBLIC SECTOR
A detailed treatment of the various concepts and theories of public sector budgeting, control and auditing, with particular emphasis on the various levels of accountability and the range of analytical support procedures required to sustain these levels. Case studies in the Government of Canada, and in selected provincial and municipal governments. (*Prerequisite:* 512, 540)

ADMN 542 (1½) COST ACCOUNTING IN THE PUBLIC SECTOR
Alternative concepts and theories of cost; standard costs for direct material and direct labour, the control of overhead costs, absorption costing and direct costing, the analysis of variances, cost allocation, responsibility accounting, joint-product and by-product costs, capital budgeting. (*Prerequisite:* 540)

ADMN 543 (1½) DEVELOPMENTAL ADMINISTRATION
A civil servant in a Third World country functions in an environment that is different from the situation in Canada or other high income countries. The purpose of this course is to understand public administrations in developing countries: the issues confronted, the policy processes employed and the decisions reached. Examples will be drawn from the Asia-Pacific region and elsewhere.

ADMIN 544 (1½) COST BENEFIT ANALYSIS
A survey of the techniques of cost benefit analysis, with emphasis on the practical problems that arise in an applied context. (*Prerequisites:* 500, 502B and 503)

ADMN 545 (1½) LOCAL GOVERNMENT ORGANIZATION, OPERATION AND FINANCE
Examination of all forms of local government in relation to functions performed, decision processes, finance and relations among local governments and between local governments and the provincial and federal government. Emphasis will be placed on the relationship between structure and performance in different environments, including urban, rural and environmentally sensitive coastal areas in British Columbia. (*Prerequisites:* 502A, 503, 504, 514)

ADMN 546 (1½) ISSUES IN MANAGEMENT OF LOCAL GOVERNMENT
The examination of topics in local government management: labour-management relations, growth management, cutback management, technologies of local government service delivery, budgeting processes, land use management and planning. Some emphasis may be placed on

quantitative analyses of local government related research data.

ADMN 547 (1½) PROGRAM IMPLEMENTATION
Fundamental issues and principles of public service provision are analyzed using a conceptual framework for the implementation process. Main features of the political and bureaucratic settings are examined. Economic, administrative, legal, political and social dimensions of authoritatively carrying out policy directives and providing public services are considered to develop and strengthen skills in systematically assessing the implementation process.

ADMN 549 (1½) PROCESSES AND PROBLEMS IN THE FORMATION OF ECONOMIC POLICY
Macroeconomic reasoning as applied to public issues, policies, and programs; the formation of monetary and fiscal policy; incomes policies; assessment of the overall economic effects of government regulation or intervention in industrial activities; federal-provincial conflicts and interagency differences in the development of economic policy. (*Prerequisite:* ECON 303, or consent of the instructor)

ADMN 551 (1½) ADMINISTRATIVE LAW
An examination of the basic principles of administrative law, emphasizing the functioning of administrative tribunals and judicial control of administrative action. (*Prerequisite:* 510)

ADMN 552 (1½) FEDERALISM AND FEDERAL-PROVINCIAL RELATIONS IN CANADA
This seminar provides a survey of the interacting elements and processes involved in the structure and functioning of contemporary federalism in Canada from a public administration perspective. Included is the theory of federalism as applied to Canada and an examination of the constitutional, political, social and economic forces which shape federal-provincial relations.

ADMN 556 (1½) THE MACHINERY OF GOVERNMENT
An examination of the structures, systems and processes of modern bureaucratic government at the federal and provincial levels. Topics may include the organization and management of priority setting, policy making, resource allocation, service delivery, regulation and public ownership. (*Prerequisite:* 504, 507)

ADMN 563 (1½) ASPECTS OF RESEARCH DESIGN
Problem solving in administrative contexts: the development process by which an administrative concern may be formed into a research project which is feasible, and whose findings may have administrative utility.

ADMN 564 (1½) SEMINAR ON SOCIAL POLICY ISSUES
An examination of objectives of social policy, methods of analysis, and links between analytical and administrative concerns. Topics and cases will be selected from the literature in areas such as health, education, welfare and social security, immigration, language rights, and consumer affairs.

ADMN 575 (1½) COASTAL RESOURCE USE, LAW AND MANAGEMENT
Examination of coastal resources and the decision processes through which uses are determined in British Columbia. Specific treatment of the characteristics of resources, rationing and enhancement processes, the legal framework, and the role of governments and political decision making within an integrated framework, drawing on concepts from economics, political science, geography and law. (Credit cannot be given for both 575 and Geography 555.)

ADMN 577 (1½) STRATEGIC PLANNING SEMINAR
This seminar will include an examination of the strategic planning process including the definition of organizational missions and objectives; the uses of environmental scanning; scenario building and forecasting; the development of strategy and the dynamics of implementation. Special emphasis is placed on the use of strategic planning as a practical management technique and the challenges and limitations of strategic planning processes in the public sector.

ADMN 578 (1½) ADVANCED METHODS OF ANALYSIS
This course builds upon basic research methods and quantitative skills acquired in 500, 501 and 514 or their equivalents. The course focuses on selected topics in statistical analysis, survey research methods and quasi experimental research design. Familiarity with SPSSx is required for students taking the course. (*Prerequisites:* 500, 502A, 502B)

ADMN 590 (1½ or 3) DIRECTED STUDIES
(May be taken more than once in different subject areas, with the permission of the Director)

ADMN 598 (3) REPORT REQUIREMENT
A substantial analysis of a significant management problem or policy issue, prepared individually in consultation with a School faculty adviser. (*Prerequisites:* 500 to 516) (Grading: INP, COM, N or F)

SOCIOLOGY

The program leading to the Master of Arts degree in sociology, while containing a core of theory, research methods, quantitative techniques and participation in the departmental seminar, is designed to provide flexibility for students as well as to reflect the diversity which characterizes the discipline. Individual programs beyond the core are designed to fit students' interests and to supplement areas in which they may require additional work, insofar as faculty resources and specializations permit.

1. *Program of Studies*

Undergraduate Competence:

Preference will be given to students with a B+ (6.00) average or better. All incoming graduate students must fulfill the requirements expected of undergraduate Honours students in this Department (i.e., SOCI 302, 371, 375, 402 and 471, or their equivalencies).

Graduate Course Work and Thesis:

All students are required to complete a minimum of 15 units of prescribed Calendar listings, of which at least 12 units must be drawn from Sociology listings in the Calendar and of which at least 12 units must be at the graduate level. All students must write a thesis and may receive a maximum of 3 units credit for the thesis. Students are required to demonstrate competence in sociological theory (SOCI 500), the methodology of sociological research design (511) and data analysis, as well as quantitative/statistical techniques (510). Ordinarily such competence shall be demonstrated by successful course completion; however, the abilities and prior performances of entering students shall be considered in the planning of their programs — both in terms of particular courses and the unit values required. In addition, students are required to enroll in a Departmental seminar (505) as part of their degree program.

Other listings are designed to facilitate the range of interests displayed by traditional and contemporary sociological inquiry (530, 535, and 590). These may capitalize on the University's computer facilities; the Library's Human Relations Area Files holdings; and the British Columbia Provincial Archives. The range of such interests is illustrated by the current area of interests declared by the sociology faculty (see below).

2. *Length of Program*

The department expects full time students to spend two years completing the Master's degree, although it is possible for outstanding students to complete the degree in twelve months.

M.A. (Interdisciplinary) in Contemporary Social & Political Thought (CSPT):

This program is open to selected students in Sociology, Philosophy and Political Science. Students must meet the core graduating requirements of the individual departments.

The Graduate Adviser in each department should be consulted for details. To complete the CSPT program in Sociology a student must complete the 15 units of requirements for an M.A. in Sociology (includ-

ing a thesis for SOCI 599 in the field of CSPT), plus at least 3 units of CSPT 500. The calendar entry under the Department of Philosophy on page 243 should also be consulted for descriptions of CSPT 500 and 590.

Admission to the program in CSPT is subject to the written approval of the Program Director. Applicants must already have been accepted for the M.A. program in Sociology.

The requirements for the program in the departments of Philosophy and Political Science differ from those in Sociology.

Faculty and Current Areas of Interest

Paul M. Baker, Ph.D. (Minnesota)	Social gerontology, small group dynamics, data analysis, social psychology
Cecilia Benoit, Ph.D. (Toronto)	Occupations and professions; medical, family and work roles; health care systems
William K. Carroll, Ph.D. (York)	Political economy, social movements; class, gender and ideology
Holly Devor, Ph.D. (Washington)	Gender variance, sexuality, feminist theory
C. David Gartrell, Ph.D. (Harvard)	Theory, social psychology, methods and statistics
R. Alan Hedley, Ph.D. (Oregon)	Work, industrialization, comparative sociology, research methods
Daniel J. Koenig, Ph.D. (Illinois)	Criminology/deviance, demography, methods, social control
William McCarthy, Ph.D. (Toronto)	Crime, social control, socio-legal studies
Richard Ogmundson, Ph.D. (Michigan)	Political, stratification, Canadian Society
Peter Vandergeest, Ph.D. (Cornell)	Comparative sociology, historical sociology, development and modernization
Jean E. Veevers, Ph.D. (Toronto)	Family, demography, sex roles
T. Rennie Warburton, Ph.D. (London)	Religion, class relations and ideology, ethnic relations

GRADUATE COURSES

Not all the following courses will be offered in a particular year. Students should consult the Department to determine the courses which will be offered this year.

SOCI 500 (1½) PROBLEMS IN SOCIOLOGICAL THEORY

SOCI 505 (1½) CURRENT PROBLEMS AND RESEARCH IN SOCIOLOGY

SOCI 510 (1½) QUANTITATIVE METHODS

SOCI 511 (1½) RESEARCH DESIGN

SOCI 530 (1½ or 3) STUDIES IN SOCIAL STRUCTURE
(May be repeated once for a total of 3 units)

SOCI 535 (1½ or 3) STUDIES IN SOCIAL PROCESSES
(May be repeated once for a total of 3 units)

SOCI 590 (1½ or 3) DIRECTED STUDIES
(May be repeated once for a total of 3 units)

SOCI 599 (3) THESIS
(*Prerequisite:* The student's supervisory committee must have approved and placed on file an acceptable written thesis proposal prior to registration) (Grading: INP, COM, N or F)

THEATRE

1. Programs in Graduate Studies
   The Department offers five programs in graduate studies:
   M.A. in Theatre History
   M.A. in Theatre/Drama in Education
   M.F.A. in Directing/Production
   M.F.A. in Design/Production
   Well qualified applicants may be admitted to a program leading to a Ph.D. in Theatre History by Special Arrangement.
2. Applicants for admission to any of the above programs must send a letter to the Theatre Department Graduate Adviser with a statement of purpose, a detailed resume of their educational background, theatre experience, and teaching experience if applicable.
3. Participation in Production
   M.A. students are encouraged to work in departmental productions.
4. Faculty Supervisors
   Each student will be assigned a faculty supervisor who will assist the student in the development of the thesis or practicum.
5. If applicants wish to be considered for a University of Victoria Fellowship, their applications must be complete by 31 December of the year prior to entry into the graduate program.

MASTER OF ARTS

All candidates are required to complete a minimum of 12 units of graduate course work (as described in the separate entries below) and a thesis of 6 units. The residence requirement is one year.

M.A. in Theatre History: Requirements

(a) A knowledge at the B.F.A. level of Theatre History. A knowledge of Design and Directing is also highly desirable.
(b) 6 units — Graduate Theatre History (other than Theatre 516)
(c) 3 units — to be chosen from the graduate areas of Theatre/Drama in Education, Design or Directing
(d) 3 units — to be chosen from a related discipline, to be approved by the Graduate Adviser (may be taken at the 300/400 level)
(e) 6 units — Theatre 599, M.A. Thesis. The candidate will submit the thesis and orally defend it as part of the requirements of the Faculty of Graduate Studies.

Normally, all admissions are conditional upon a diagnostic examination in theatre history.

NOTE: A candidate may apply to transfer to the Ph.D. program by Special Arrangement after one year of study. If the application is granted, the complete year of courses and residence will be applied to the requirements for the Ph.D.

M.A. in Theatre/Drama in Education: Requirements

(a) A knowledge at the B.F.A. level of Theatre History, Design and Directing is highly desirable.
(b) Practical teaching experience.
(c) 6 units — Theatre 506 and 507.
(d) 3 units — To be chosen from the graduate areas of Theatre History, Design or Directing.
(e) 3 units — To be chosen from a related discipline, to be approved by the Graduate Adviser (may be taken at the 300/400 level)
(f) 6 units — Theatre 599, M.A. Thesis. The candidate will submit the thesis and orally defend it as part of the requirements of the Faculty of Graduate Studies.

MASTER OF FINE ARTS

The programs normally require a minimum of two years in residence. Applicants must have practical theatre experience and normally, prior to admission, will be required to take a diagnostic examination. Any deficiencies will represent additional requirements for the student and must be eliminated before the student may enroll in the graduate level courses in that area. All courses must be taken at the Graduate level unless otherwise specified. All admissions are conditional on the diagnostic examination.

Candidates are required to write comprehensive examinations before proceeding to the practicum. Details are provided in the Department Handbook.

M.F.A. in Directing/Production: Requirements

(a) A knowledge at the B.F.A. level of Lighting, Costume and Scene Design, Theatre History and Directing. The student's knowledge will be assessed by the diagnostic examination (see above).
(b) 6 units — Directing and Advanced Directing (other than 515).
(c) 3 units — either Lighting, Costume or Scene Design (other than 514).
(d) 3 units — Theatre History.
(e) A written comprehensive examination must be passed no later than the spring term of the second year and prior to commencing work on the practicum production. The comprehensive examination will emphasize the practical areas of the theatre but will include Theatre History. This examination will be given in two parts over a two day period and will be approximately four hours for each part.
(f) 6 units — Theatre 598, M.F.A. Practicum
  (i) A full length production to be decided upon in consultation with the student's supervisor and the Department's graduate faculty.
  (ii) An oral defense of the practicum production is part of the requirements of the Faculty of Graduate Studies.

M.F.A. in Design/Production: Requirements

(a) A knowledge at the undergraduate level of Lighting, Costume and Scene Design, and a general understanding of Theatre History, Directing and Art History. The student's knowledge will be assessed by the diagnostic examination (see above).
(b) 12 units — Four courses in theatre design/production other than Theatre 514.
(c) 3 units — To be chosen from Theatre or a related discipline, to be approved by the Supervisor (may be taken at the 300/400 level).
(d) M.F.A. Design candidates will be given the opportunity to design mainstage productions.
(e) A written comprehensive examination must be passed no later than the spring term of the second year and prior to commencing work on the practicum production. This examination will be given in two parts over a two day period and will be approximately four hours for each part.
(f) 6 units — Theatre 598, M.F.A. Practicum
  (i) The nature of the practicum will be determined in consultation with the student's supervisor and the Department's graduate faculty.
  (ii) An oral defense of the practicum production is part of the requirements of the Faculty of Graduate Studies.

DOCTOR OF PHILOSOPHY

Ph.D. in Theatre History by special arrangement with the Department. Applicants should apply directly to the Department, and depending on the area of research selected may be permitted to work on a Ph.D. by special arrangement.

Faculty and Major Fields of Interest

Michael R. Booth, Ph.D. (London)	19th and 20th century British theatre, experimental theatre
Linda Hardy, M.A. (Toronto)	Acting; theories of acting; 19th century British theatre; Elizabethan theatre, modern Shakespearean performance and production
Giles W. Hogya, Ph.D. (Northwestern)	Lighting and set design, directing, children's theatre, creative dramatics
Alan Hughes, Ph.D. (Birmingham)	18th and 19th century British theatre, Shakespeare in performance, Elizabethan theatre, Greek theatre, Canadian Theatre, directing
John Krich, M.F.A. (Yale)	Acting, directing, popular entertainment (circus, carnival, hippodrama)
Harvey M. Miller, Ph.D. (Pittsburgh)	Directing, acting, Elizabethan theatre production, the American theatre
Irene Pieper, M.A. (San Francisco State)	The history of costume, ethnic costume; costume and makeup design for theatre, film and television
Juliana M. Saxton, B.A. (Toronto)	Drama in education, theatre in education, production, promotion, administration and tour management
Allan Stichbury, B.F.A. (Alberta)	Stage design (scenic, costumes and lighting); Canadian theatre.

GRADUATE COURSES

NOTE: The content of courses numbered 500-590 may vary in different academic sessions. These courses may then be taken for credit more than once at the discretion of the Department. Not all the following courses will be offered in a particular year. Students should consult the Department to determine the courses which will be offered this year.

THEA 500 (1½ or 3) METHODS AND MATERIALS OF THEATRE RESEARCH

THEA 501 (1½ or 3) SEMINAR IN HISTORY AND CRITICISM OF TRAGEDY

THEA 502 (1½ or 3) SEMINAR IN HISTORY AND CRITICISM OF COMEDY

THEA 503 (1½ or 3) SEMINAR IN EUROPEAN THEATRE HISTORY

THEA 504 (1½ or 3) SEMINAR IN NORTH AMERICAN THEATRE HISTORY

THEA 505 (1½ or 3) SEMINAR IN THEATRICAL STYLES

THEA 506 (1½ or 3) SEMINAR IN DRAMA IN EDUCATION

THEA 507 (1½ or 3) SEMINAR IN THEATRE IN EDUCATION

THEA 508 (1½ or 3) SCENE DESIGN

THEA 509 (1½ or 3) LIGHTING DESIGN

THEA 510 (1½ or 3) COSTUME DESIGN

THEA 511 (1½ or 3) PRODUCTION

THEA 512 (1½ or 3) DIRECTING

THEA 513 (1½ or 3) SEMINAR IN THEATRE AESTHETICS

THEA 514 (1½ or 3) SEMINAR IN DESIGN

THEA 515 (1½ or 3) SEMINAR IN DIRECTING

THEA 516 (1½ or 3) SEMINAR IN THEATRE HISTORY

THEA 520 (1½ or 3) ADVANCED PROBLEMS IN SCENE DESIGN

THEA 521 (1½ or 3) ADVANCED PROBLEMS IN LIGHTING DESIGN

THEA 522 (1½ or 3) ADVANCED PROBLEMS IN COSTUME DESIGN

THEA 523 (1½ or 3) ADVANCED PROBLEMS IN DIRECTING

THEA 590 (1½ or 3) DIRECTED STUDIES

THEA 598 (Credit to be determined) M.F.A. PRACTICUM
(Grading: INP, COM, N or F)

THEA 599 (Credit to be determined) M.A. THESIS
(Grading: INP, COM, N or F)

VISUAL ARTS

The Department of Visual Arts offers a program leading to the degree of Master of Fine Arts.

The normal length of time for the completion of the M.F.A. is two years of full time study, although a student may be advised, or permitted upon Departmental recommendation, to delay the final exhibition for a period of not more than twelve months.

Acceptance in the M.F.A. in Visual Arts is conditional upon submission of an extensive folio of work; this should be presented in the form of slides and photographs with a detailed description of the original works. Normally a student is expected to attend an interview, but this may be waived in difficult circumstances, in which case a statement of intent will be required. Students who have not previously completed the equivalent of twelve units of art history, six of which must be at the 300 or 400 level, will be required to take the necessary additional courses at the University of Victoria before the granting of the M.F.A. NOTE: Applicants wishing to be considered for fellowships must have completed applications in the Graduate Admissions and Records Office by February 15. All other applications must be completed by the end of February.

Students with a B.F.A. from the University of Victoria will be encouraged to seek their master's degree elsewhere.

The program encompasses the four areas of Painting, Photography, Printmaking, and Sculpture, and the student is expected to specialize in one of these areas. Provided that evidence is shown of emphasis and major concentration in the area chosen, the student will be encouraged to pursue other interests which are acceptable and feasible within the limitations of facilities and faculty.

At the end of the first year students must take part in a group show with colleagues in their first year. This exhibition will be evaluated by faculty members in the Department, in order to determine the advisability of a student continuing to the second year. Art 501, 512, 522, 532 and 542 will culminate in a one man show, normally at the end of the second year of study. This final exhibition (598) will be the major source of evaluation for the student's attainment of the M.F.A., and will therefore form the basis of the final oral examination.

Notwithstanding the art history requirement, a student must complete the following courses:
one two year sequence; 500 and 501, 511 and 512, or 521 and 522, or 531 and 532 or 541 and 542; in addition to 580, 581 and 598.

Students will be expected to meet on a regular basis with their faculty supervisor(s) for constructive critiques and seminars dealing with their work.

Faculty and Areas of Interest

Mowry Baden, M.A. (Stanford)	Sculpture
Pat Martin Bates, Dip. Royale, (Académie Royale des Beaux Arts, Antwerp), R.C.A.	Printmaking
Roland Brener, Post Dip. A.D. (St. Martin's School of Art, London)	Sculpture
Gwen Curry, M.F.A. (Arizona)	Printmaking
Fred Douglas	Photography
Lynda Gammon, M.F.A. (York)	Drawing, sculpture
Donald Harvey, A.T.D. (Brighton) R.C.A.	Painting, drawing
Douglas G. Morton, R.C.A.	Painting
George W. Tiessen, M.F.A. (Cornell)	Painting

GRADUATE COURSES

Not all the following courses will be offered in a particular year. Students should consult the Department to determine the courses which will be offered this year.

ART 500 (9) FIRST YEAR DRAWING

ART 501 (9) SECOND YEAR DRAWING
Graduate students will be expected to complete an extensive portfolio of work over two years that demonstrates a high degree of professionalism, skills and artistic integrity.

ART 511 (9) FIRST YEAR PAINTING

ART 512 (9) SECOND YEAR PAINTING
Over the two year period normally required for completion of the M.F.A., students are expected to complete a large body of work which reflects their personal imagery or concerns.

ART 521 (9) FIRST YEAR SCULPTURE

ART 522 (9) SECOND YEAR SCULPTURE
Graduate students will have access to all sculpture workshop and equipment facilities. Students will be encouraged to develop an individualistic and investigative approach to material and concepts in sculpture.

ART 531 (9) FIRST YEAR PRINTMAKING

ART 532 (9) SECOND YEAR PRINTMAKING
Students wishing to pursue printmaking as the major area of study will be able to choose from Intaglio Printing, Screen Printing, Relief Printing and Lithography. With departmental approval, students may work in more than one of the above printmaking fields. Students will be expected to demonstrate a high degree of professional skills and artistic integrity in printmaking at the graduate level. They will be expected to be self motivated and have the ability to work and do research in printmaking with a minimum of supervision.

ART 541 (9) FIRST YEAR PHOTOGRAPHY

ART 542 (9) SECOND YEAR PHOTOGRAPHY
The emphasis in this area is on the photograph as a self critical form of fiction. Students will have access to the department's photography facilities which are mainly in black and white processing. (Note: Students must supply their own camera.)

ART 580 (6) FIRST YEAR SEMINAR

ART 581 (6) SECOND YEAR SEMINAR
The Graduate Seminar is a forum for the exchange of ideas. Students discuss intellectual issues and selected readings of interest to practising artists. In consultation with the seminar leader, they write short papers about connections between their studio practise and cultural influences, both current and historical. In addition, students have an opportunity to discuss their preparations for year end critiques and the final oral examination.

ART 598 M.F.A. DEGREE EXHIBITION
This final exhibition will be the major source of evaluation for the student's attainment of the M.F.A. and should be regarded as the equivalent of the scholarly thesis of an academic discipline. The degree exhibition will be evaluated by the student's committee which will submit its decision to the Department for approval. Graduating students must be available to speak to their work and answer questions from the examining committee. The committee may ask questions about the cultural, social and theoretical relations apparent in the student's work. Students are required to provide documentation of their graduating exhibition which will be on file in the department. This documentation will take the form of slides, photographs, videotapes or other forms appropriate to the student's production.

CENTRE FOR EARTH AND OCEAN RESEARCH

Christopher R. Barnes, B.Sc. (Birm.), Ph.D. (Ott.), F.R.S.C., Director

The Centre for Earth and Ocean Research is a cooperative venture between the University and several government agencies sited in Greater Victoria: Institute of Ocean Sciences (Fisheries and Oceans, Canada); Pacific Geoscience Centre (Energy, Mines and Resources, Canada); Defence Research Establishment Pacific, Royal Roads Military College (National Defence, Canada); and the B.C. Geological Survey (Energy, Mines and Petroleum Resources, British Columbia).

Research topics which can be pursued under the auspices of this Centre include: geophysics and geology, both terrestrial and marine; physical, chemical and some aspects of biological oceanography; and underwater acoustics.

Cooperating University Departments are: Physics and Astronomy, Geography, Chemistry, Biology, Electrical and Computer Engineering, and Mechanical Engineering. Graduae students wishing to take part in the work of the Centre register with an appropriate University Department, but may conduct a large part of their thesis research working with personnel and equipment of a cooperating agency. Personnel from the agencies participate in giving appropriate course work. Both Master's and Doctoral work can be conducted through the Centre.

CENTRE FOR FOREST BIOLOGY

The purpose of the Centre is to carry out fundamental and applied research and to train graduate students and postdoctoral fellows in Forest Biology, emphasizing Forest Regeneration and Biotechnology. The faculty members collaborate and work in close association with scientists from Forestry Canada at Pacific Forestry Centre (PFC) and B.C. Ministry of Forests (MOF) Research Branch. Close association with the forest industry and forest industry laboratories is maintained in order to ensure maximum technology transfer. The knowledge generated is disseminated through scientific publications, conferences, lectures and through the diverse academic courses offered by the Centre.

Research topics which can be pursued under the auspices of this Centre include: conifer reproductive biology, seedling physiology, stress physiology, water relations, plant molecular biology, tissue culture and forest pathology.

Cooperating University Departments are: Biology and Biochemistry and Microbiology. Graduate students wishing to take part in the work of the Centre register with an appropriate University Department, but may conduct a large part of their thesis research working with personnel and equipment of a cooperating agency. Personnel from the agencies participate in giving appropriate course work. Both Master's and Doctoral work can be conducted through the Centre.

FACULTY OF HUMAN AND SOCIAL DEVELOPMENT

James C. McDavid, B.A., M.A. (Alta.), M.A., Ph.D. (Indiana), Dean of the Faculty
Michael J. Prince, B.A. (Car.), M.P.A. (Queen's), Ph.D. (Exeter), Lansdowne Professor (Social Policy)
Brian Wharf, B.A., B.S.W., M.S.W. (Brit. Col.), Ph.D. (Brandeis), Professor
Marie L. Campbell, B.A., M.A. (Brit. Col.), Ph.D. (Tor.), Associate Professor

The Faculty of Human and Social Development comprises the Schools of Child and Youth Care, Health Information Science, Nursing, Public Administration and Social Work, and offers undergraduate programs leading to the degrees of Bachelor of Arts in child and youth care, Bachelor of Science in health information science, Bachelor of Science in Nursing, Bachelor of Social Work, and to the Diploma in Public Sector Management; and a graduate program leading to the degree of Master of Public Administration.

All of the schools have developed a distinctive curriculum in response to the needs of their respective professions. However, some clients of the human services cannot be neatly classified by professional boundaries, and hence a major objective of the Faculty of Human and Social Development is to develop opportunities for students who will work together as professionals to learn together while in university. Such opportunities include courses covering common content, workshops and conferences. In addition faculty members in the Faculty of Human and Social Development are encouraged to undertake research projects on an interdisciplinary basis including collaboration with colleagues in other Faculties.

Admission and Registration

See pages 7-12 inclusive of the Calendar. Probability and Statistics 12 is recommended for undergraduate admission to the Faculty of Human and Social Development. Mature students who do not have Mathematics to the Grade XI level are encouraged to take a refresher course prior to undertaking their studies. See additional requirements under each program.

Application for Admission

Applicants for the professional schools in the Faculty of Human and Social Development are required to complete a separate application for the School of interest *in addition* to the application to the University.

General Regulations

Calendar regulations governing registration, fees, and academic advancement (see pages 15-20) apply to all students registered in the Faculty of Human and Social Development. Special regulations are set out under the appropriate area.

Guidelines for Professional Conduct

The Faculty of Human and Social Development expects students to develop and adhere to a professional code of conduct. The Faculty supports models for professional conduct based on the following guidelines:

1. Submission of oneself to a professional code of ethics;
2. The exercise of personal discipline, accountability and judgment;
3. Acceptance of personal responsibility for continued competency and learning;
4. A willingness to serve the public, client or patient and place them before oneself;
5. The ability to recognize the dignity and worth of all persons in any level of society;
6. A willingness to assist others in learning;
7. The ability to recognize one's own limitations;
8. The maintenance of confidentiality of information appropriate to the purposes and trust given when that information was acquired; and
9. Acceptance that one's professional abilities, personal integrity and the attitudes one demonstrates in relationships with other persons, is the measure of professional conduct.

Unprofessional Conduct: All students in the Faculty of Human and Social Development will be subject to the provisions of the codes of ethics of their respective professions, and may be required to withdraw from their school for violating these provisions. Students may also be required to withdraw from their school when ethical, medical or other reasons interfere with satisfactory practice in their respective disciplines.

Regulations Concerning Practica

General:

The Faculty reserves to its individual schools and programs, the right to approve any agency or institution that provides placements for student practica, and to change any placement assigned to a student. The student, however, has the right to be informed in writing of the reasons for any change in placement. While the Faculty accepts a responsibility to provide a sufficient number of practicum opportunities to serve the needs of all registered students, a student may be required to withdraw from a practicum course if none of the available practicum agencies will accept that particular student.

Dates:

The dates of practica will be established by each school or program, and will be announced to the students involved at the beginning of each term.

Attendance:

Attendance at practicum activities is required. Students are expected to notify the placement agency whenever practicum appointments cannot be kept, and also to inform the course instructor.

Unprofessional Conduct in Practicum: It is the responsibility of the course instructor to inform students of the criteria by which unprofessional conduct will be judged in the practicum setting.

Denial and Withdrawal:

(a) Denial
Students will be denied the practicum experience if their preparatory work is considered unsatisfactory by the Director of the School in the Faculty of Human and Social Development.

(b) Temporary Withdrawal of Students Pending Report
Where, during the course of a term, there are reasonable grounds to believe that the conduct or lack of competence of a student enrolled in practicum has adversely affected or may adversely affect
(i) Clients or pupils,
(ii) Personnel including students associated with the practicum, the Director may require a student to withdraw temporarily from the practicum pending the receipt of a report on the conduct and lack of competence of the student.

(c) Withdrawal
After giving the student an opportunity to be heard, the Director may require a student to withdraw from the practicum where the Director is satisfied that the student's conduct or lack of competence may adversely affect members of any of the groups identified in (b) above.

(d) Voluntary Withdrawal
Students seeking voluntary withdrawal from a practicum, whether permanent or temporary, must receive permission to do so from their faculty supervisor in Human and Social Development.

(e) Notification of Records Services
Students who withdraw temporarily from a practicum must notify Records Services in writing. Students who are required to withdraw from a practicum will be withdrawn from any course involved by written notification from the Director to Records Services.

Readmission:

If students who have withdrawn from a practicum for whatever reason later wish to reenter the practicum they must apply for readmission to the course and should not assume that readmission is guaranteed.

Appeals:

The normal avenues of final appeal (see page 14) are available to students who have been required to withdraw from a practicum. Stu-

dents in the Faculty of the Human and Social Development may follow regular appeal procedures within the Faculty.

English Requirement

All four year baccalaureate programs in the Faculty of Human and Social Development will normally include 3 units of English, chosen in consultation with the Department of English.

Academic Advice

Academic advice about the professional schools in the Faculty of Human and Social Development is available from faculty members of the appropriate school, on an appointment basis.

Course Work at other Universities

Students who plan to undertake upper level course work at another university must normally receive prior approval from the Dean and the Director of the School in which the student is registered if they wish such course work to be credited toward a degree program or diploma program in the Faculty of Human and Social Development. Upon successful completion of such course work it is the student's responsibility to request the Registrar of the other university to send an official transcript of record to the Records Office of the University of Victoria.

Standing at Graduation

For degrees granted in the Faculty of Human and Social Development, a graduating average of 7.00 is the lower limit for a "First Class" designation.

Cooperative Education Program

Please refer to page 32 of the Calendar for a general description of Cooperative Education.

In the Faculty of Human and Social Development, a Cooperative Education program is offered by the School of Public Administration at the graduate level and by the School of Health Information Science at the undergraduate level.

Admission to and completion of Cooperative Education Programs are governed by individual departmental requirements. As a required part of the program, students are employed for specific work terms, each with a minimum duration of 13 weeks. This employment is related as closely as possible to the student's course of studies and individual interest.

Students may withdraw from the Cooperative Education Program at any time and remain enrolled in a degree program offered by the school.

Details of the program in the School of Public Administration are outlined on page 285 and on page 301 for Health Information Science.

Advisory Committees

Programs in the Faculty of Human and Social Development receive the benefit of advice and guidance from advisory committees whose members are drawn from professionals engaged in various private agencies or Government departments. Further information is available from each school or program.

INTERDISCIPLINARY COURSES

The following elective courses are open to all students undertaking degrees in the Faculty of Human and Social Development.

(Course offering codes: Y = Sept.-Apr., F = Sept.-Dec., S = Jan.-Apr., K = May-Aug., NO = Not offered this session)

FHSD 400 (1½) POLICY IN THE HUMAN SERVICES

The objectives of this course are to provide an introduction to the main organizational structures of, and stages in, the social policy making process in Canada; to strengthen skills in the analysis of policies and programs in Canadian human services; to critically examine different ideologies and theories through which the welfare state has been examined in various countries and to develop an appreciation of the interdisciplinary nature of social policy as a field of academic and applied activity. (3-0)

FHSD 401 (1½) WOMEN IN THE HUMAN SERVICES

The objective of this course is to analyze the social, economic and political forces which have shaped the status of women in the Human Services. This analysis will include an examination of women as consumers and women in management positions. An important aspect of the course will be a comparison of the status of women in different professions, particularly the traditional women's professions of nursing, social work and child and youth care. (3-0)

FHSD 402 (1½) INTRODUCTION TO INFORMATION TECHNOLOGY FOR PROFESSIONALS IN THE HUMAN AND SOCIAL SERVICES

An introduction to the nature, organization and management of information and information technology, as these are encountered in the human and social services. No previous experience with computers is required. The use of computer hardware and software, with particular emphasis on operating systems, electronic communications, database management, spreadsheet applications, and computer graphics is discussed. Also addressed are the ethical and professional implications of changes in the nature and use of information and information technology in the human and social services. (3-0)

FHSD 460 (1½) SPECIAL TOPICS IN HUMAN AND SOCIAL DEVELOPMENT

This is a variable content course which will focus on current and emerging issues in the human services. Examples of appropriate content include the prevention and treatment of alcohol and drug abuse and cross cultural issues in the human services. (Restricted to students in the Faculty of Human and Social Development in the third or fourth year of study) (May be taken more than once for credit to a maximum of three credits) (Offered as resources permit) (3-0)

MULTIDISCIPLINARY MASTERS

Multidisciplinary Masters in Policy and Practice in Health and Social Services

The Schools of Child and Youth Care, Nursing and Social Work, in the Faculty of Human and Social Development, offer a course of study leading to the degree of Masters of Arts, for nursing and child and youth care students, or Master of Social Work, for social work students, in Policy and Practice in Health and Social Services.

The purpose of the multidisciplinary graduate program is to prepare graduates from the professions of child and youth care, nursing, and social work to contribute to the improvement of policy and practice in health and social services. The program provides a unique opportunity for experienced professional nurses, child and youth care practitioners, and social workers to reflect on and analyze current issues and problems both in their professions and in two service fields, specifically, children and families, and the elderly. The program aims to attract the intellectually curious professionals who have a commitment to improving public policies and professional practice.

The curriculum addresses the impact of policy, organizational and professional factors on practice; builds skills in research methods and inquiry; and presents information about the knowledge, theory, policy and practice in two fields of service.

All courses and the thesis focus on developing the qualities of reflection, analysis, and curiosity in examining problems. The ability to propose and communicate clear and flexible solutions to these problems will be of paramount importance.

Admission Requirements

In addition to transcripts, letters of recommendation, and application forms required by the Faculty of Graduate Studies, the Faculty of Human and Social Development Multidisciplinary Master's Program requires applicants to have or to make up a background knowledge of Canadian government and policy, research methods and statistics.

Child and Youth Care applicants must have a B.A. in Child and Youth Care or Bachelor's degree in social sciences. Nursing applicants must have a B.Sc.N. or B.N., and Social Work applicants must have a B.S.W.

Normally, a B+ average (6.00 G.P.A.) for the last two years of university work is a minimum requirement for admission to the program. In addition, all applicants must normally have two years post-baccalaureate relevant professional experience.

Applications

Initial inquiries regarding graduate studies in Policy and Practice in Health and Social Services should be addressed to the Graduate Adviser, Faculty of Human and Social Development Application forms may be obtained from the office of the Dean of Graduate Studies.

Each School reviews the applications of students from its discipline and makes an admission recommendation to the Faculty. As require-

ments of each discipline vary, the Schools each have their own admission statement. Prospective students can obtain these statements from the Schools.

The closing date for application is March 31st. Completed applications and supporting documents must be available for consideration by the Schools and Faculty on, or prior to, that date.

Program of Studies

The Master's Program consists of a minimum of 20.5 units which includes common courses, the choice between courses on the two fields of aging or childhood and family, and a thesis (FHSD 599). The Master's thesis must be defended in an oral examination.

FHSD GRADUATE PROGRAM STRUCTURE

Term 1 — Fall

Policy Context of Practice in Health and Social Services (3)

Organizational Context of Practice in Health and Social Services (3)

Research I: Knowledge & Inquiry in Health & Social Services (1½)
AND
Promoting Professional Community Learning (1½)
OR
Ethical Behaviour in Professional Practice (1½)

Term 2 — Spring

Policy Context of Practice in Health and Social Services (cont'd.)

Organizational Context of Practice in Health and Social Services (cont'd.)

Research II: Research Methods in Health & Social Services (1½)
AND
Knowledge & Theory of Aging (2)
OR
Knowledge and Theory of Childhood & Family

Term 3 — Summer

Policy & Practice in Services for the Elderly (2)
OR
Policy and Practice in Services for Children & Families (2)
AND
Thesis* (6)

Term 1 —	4 courses for	6 units
Term 2 —	4 courses for	6½ units
Term 3 —	1 course plus thesis for	8 units
	Total	20½ units

* A Thesis Supervisor and Supervisory Committee will normally be appointed by the end of Term 1.

FHSD 500 POLICY CONTEXT OF PRACTICE IN HEALTH AND SOCIAL SERVICES
This course will examine the main concepts and theories of policy and decision-making. Perspectives to be considered include feminist, pluralist, social class and rationalist theories. Students will learn about health and social policy of different types, at various institutional levels, and stages of the policy process; examine how policies interact and impact on the public; and analyze emerging issues to discover how policy development is influenced.

FHSD 501 ORGANIZATIONAL CONTEXT OF PRACTICE OF HEALTH AND SOCIAL SERVICES
This course presents the conceptual and theoretical foundations for understanding the organization of professional work, organizational change, and the organization of ethical practice. Students will reflect on their own work experiences to develop a critical methodological approach to the investigation of organizational practices, e.g. document-based management, intra-organizational relations, and fiscal accountability.

FHSD 502A RESEARCH I: KNOWLEDGE AND INQUIRY IN HEALTH AND SOCIAL SERVICES
This course will explore assumptions underlying the creation of scientific knowledge and different approaches to knowing authoritatively. Issues related to conducting research in a variety of health and social service settings will be discussed.

FHSD 502B RESEARCH II: RESEARCH METHODS IN HEALTH AND SOCIAL SERVICES
On the basis of professional knowledge and previous research preparation, this course will focus on designing research studies related to students' interests and experience. Students will define a research project, gather background information, develop a conceptual framework for investigating a topic, examine appropriate methodologies for data collection and data analysis, and explore effective ways to apply research findings.

FHSD 503 PROMOTING PROFESSIONAL AND COMMUNITY LEARNING
This course explores factors which influence learning within the organization and the community and which empower learners, and lead to personal, professional and community growth and development. Learners will examine their perspectives on teaching and learning through reflection on their own and others' experiences, the literature and research.

FHSD 504 ETHICAL BEHAVIOUR IN PROFESSIONAL PRACTICE
This course will address theoretical foundations for ethics and moral thinking, with an emphasis on application to professional practice. Also examined will be codes of ethics, standards of practice, and the impact of the organizational context on professional behaviour.

FHSD 505 KNOWLEDGE AND THEORY OF AGING
This course examines the process of aging from a holistic perspective incorporating sociological, psychological, physical and spiritual perspectives. Students will be introduced to concepts, theories and diverse methods of inquiry for understanding aging.

FHSD 506 KNOWLEDGE AND THEORY OF CHILDHOOD AND FAMILY
This course will explore the knowledge, research and current theoretical approaches to understanding the needs and development of Canadian children, youth and families. Concepts such as change and stability, networking, empowerment, relationship enhancement as well as a variety of socio-economic factors will be examined within a social ecological framework.

FHSD 507 POLICY AND PRACTICE IN SERVICES FOR THE ELDERLY
This course will enable students to develop skills in analyzing policies for the elderly and to identify strategies for improving connections between the objectives of policy and the needs of older persons.

Particular attention will be paid to the implementation phase of the policy-making process as the connecting stage between policy objectives and clients' needs, and to the role of the professional practitioner in influencing policy.

FHSD 508 POLICY AND PRACTICE IN SERVICES FOR CHILDREN AND FAMILIES
This course will enable students to develop skills in analyzing policies for children and families and to identify strategies for improving connections between the objectives of policy and the needs of children and families.

Particular attention will be paid to the implementation phase of the policy-making process as the connecting stage between policy objectives and clients' needs, and to the role of the professional practioner in influencing policy.

FHSD 590 DIRECTED STUDIES
Individual studies under the direct supervision of one or more faculty members. The content, credit value, and method of evaluation must be approved by the instructor and the Graduate Advisor prior to registering in this course. May be taken more than once, so long as course content is different from that previously taken.

FHSD 599 THESIS
The thesis will entail specialized research on a topic area chosen in consultation with the student's supervisory committee. In their thesis students will investigate, analyze and propose solutions to pressing problems in their profession either in the field of aging and the elderly or the field of children, youth and families. The thesis will represent the application of research skills to current issues, and fulfills the same purpose as a practicum in clinical programs.

SCHOOL OF CHILD AND YOUTH CARE

James P. Anglin, B.A. (Car.), M.S.W. (Brit. Col.), Associate Professor and Director of the School
Alan R. Pence, B.A., M.S. (Portland St.), Ph.D. (Ore.), Professor
Frances A.S. Ricks, B.A. (Ore.), M.Sc. (Indiana), Ph.D. (York), Professor
Carey J. Denholm, S.B.St.J., Dip. Teach. (Tas.) Dip.Ed. Deaf, B. Ed., M.Ed. (Brit. Col.), Ph.D. (U. of Vic.), Associate Professor
Roy V. Ferguson, B.A., Ph.D. (Alta.) Associate Professor
Valerie Kuehne, B.Sc.N. (Alta.), M.Ed. (Loyola), Ph.D. (Northw.), Assistant Professor
Sandra Griffin, B.A., M.A. (U. of Vic.), Practica and Admissions Coordinator
Colleen Gunster, B.A. (U. of Vic.), Program Assistant - Extension Program
Pierre Laliberté, B.A. (U. of Vic.), Admissions Coordinator
Robert Martin, B.S.W., M.P.A. (U. of Vic.), University Extension Program Coordinator

Visiting and Adjunct Appointments

Greg Saunders, B.A., M.A. (U. of Vic.), Visiting Lecturer (1990-91)

PROFESSIONAL ADVISORY COMMITTEE

Ms. Leslie Arnold, Superintendent, Family and Child Service, Ministry of Social Services and Housing
Dr. Basil Boulton, Medical Coordinator, Child and Family Ambulatory Unit, Victoria General Hospital
Ms. Dana Brynelson, Provincial Advisor, Infant Development Programs, B.C.
Mr. Dave Burgess, Coordinator, Child Care Counsellor Program, Douglas College, Vancouver
Mr. Graham Carr, Director of Operations, Ministry of the Solicitor General, Youth Detention Centre, Burnaby
Mr. Harold Carson, Coordinator of Special Education, Behaviour Disorders, Ministry of Education, Vancouver
Ms. Jennifer Charlesworth, Associate Director of Policy Planning and Legislation
Dr. Katie Cooke, Consultant
Ms. Gayle Davies, Program Manager, Community Care Facilities Licensing (Child), Ministry of Health
Mr. Gerry Fisher, Executive Director, Arbutus Society for Children, Victoria
Mr. Larry Haberlin, Area Counsellor, Grandview Elementary School, Vancouver, B.C.
Dr. Donald Knowles, Professor, Department of Psychological Foundations in Education, University of Victoria.
Mr. Paul MacNamara, Director Child and Youth Care Services, Arbutus Society for Children, Victoria
Ms. Wendy Neumann, Learning Assistance Coordinator, Victoria High School
Mr. Brent Parfitt, Deputy Ombudsman for Children, Office of the Ombudsman of B.C.
Mr. Stan Warlow, Executive Director, Coastal Community Services
Designate, Child and Youth Care Association of British Columbia
Designate, Early Childhood Educators of British Columbia
Designate, Federation of Private Child Care Agencies of British Columbia

PROGRAM

The School of Child and Youth Care offers a program of academic study and field work practice leading to a B.A. in Child and Youth Care. The course of study provides graduates with both the academic breadth of a liberal arts degree and the specific professional education to enter a variety of child and youth care employment settings. These settings range from early intervention with special needs infants to youth correction programs, from community based programs, such as, day cares, schools, and group homes, to residential treatment facilities and hospital based settings. Graduates of the School of Child and Youth Care are most often, but not exclusively, employed to provide intensive and continuous therapeutic care to special needs children and youth (0-18 years). The breadth of the child and youth care field requires a primary curriculum focus on generic aspects of caregiving. These generic components include a focus on normative development and social competence as a context for therapeutic intervention.

BACHELOR OF ARTS IN CHILD AND YOUTH CARE

The B.A. in Child and Youth Care is awarded following successful completion of 60 units of university recognized credit. On campus students enter the program upon completion of a minimum of 12 units of university credit or its recognized equivalent, e.g., transfer from a community college. (See Admission Procedures below.)

Some 200 level courses in Child and Youth Care may be taken by students not enrolled in the B.A. Program with the permission of the Director.

The B.A. program of study includes core and elective courses as outlined in the "basic program" section below. Within this program students have considerable freedom in course selection. Students with professional child and youth care experience who may be eligible to challenge non-practicum courses upon admission to the School of Child and Youth Care and should consult with the Admission Coordinator prior to the beginning of the fall term. Practicum courses are not open to challenge; students are placed in practicum settings in accordance with their professional background and current learning needs. Students should give special attention to the Regulations Concerning Practica (see page 294).

DISTANCE EDUCATION (Off Campus Students)

The B.A. degree in Child and Youth Care is available in cooperation with the Division of University Extension for off campus students through courses delivered by distance education. The off campus format allows child and youth care practitioners to continue employment while pursuing professional educational credentials.

The School's introductory core (200 level) courses delivered by distance education may also be taken by students who do not intend to complete the degree program.

Admission

Prior to admission to the School of Child and Youth Care off-campus students are required to complete a pre-entry program which includes CYC 200A, 200B, and 252 in addition to 3 units of university transfer introductory Psychology and 3 units of university transfer introductory English. To be eligible for entry into the program, students must achieve a grade of C+ or higher in the core and required Child and Youth Care courses and maintain an overall grade point average of C+ or higher.

Upon successful completion of these prerequisite courses, students applying for admission to the School must support their applications with two letters of reference from previous or current employers. In some cases, students may be required to attend a personal interview to determine suitability. A minimum of two years paid employment in the child and youth care field is normally required for entry into the off campus degree program.

Off campus candidates for the B.A. in Child and Youth Care degree may be permitted, with the approval of the Dean of Human and Social Development, to present up to 9 units of courses in the final 30 units of their program, completed through institutions other than the University of Victoria.

These nine units of course work may consist of 300 or 400 level courses approved as equivalent to University of Victoria courses. Program students are advised to ensure the acceptability by the School of any elective courses through request for a Letter of Permission from the Director of the School. A list of approved equivalents at other institutions is available through the Child and Youth Care Extension office.

Up to 50 students will be admitted to the off campus degree program each year and the program will normally be completed within six calendar years from the date of admission.

For further information, contact The University Extension Coordinator, the School of Child and Youth Care at the University of Victoria, Box 1700, Victoria, B.C. V8W 2Y2, telephone (604) 721-7980.

ADMISSION PROCEDURES (On Campus Students)

Enrollment in the School of Child and Youth Care is limited. To be eligible to apply to the School a student must have completed a minimum of 12 units of university study or equivalent recognized transfer credit. Of these units, 3 units of university transfer introductory psychology (normally Psychology 100 or equivalent) and 3 units of university transfer introductory English are required. A minimum grade point average of 3.00 (UVic C+) in the immediately preceding 12 units of study is required. In addition, a grade of C+ or higher in Psychology and English is also required.

Students who have completed a human services training program at a college may be eligible to receive additional credit from the School. Completed college level human service training programs with a B average or higher will be evaluated at a maximum of 6 nonspecific child and youth care units for a one year training program and a maximum of 12 units for a two year (or more) training program. Equivalent *and* human service units cannot exceed 15 units.

Students are selected on the basis of personal and professional suitability as well as academic standing. An interview is normally required as part of the application process. Paid or volunteer experience with special needs children and/or youths is considered in the admission decision.

Applicants to the program who are transferring from other postsecondary institutions must submit to the Director of Admission Services by March 31: (1) an Application for Admission to the University, (2) a School of Child and Youth Care Application Form, (3) Letter of Intent outlining the applicant's past experience and career objectives, (4) two copies each of any pertinent academic transcripts and diplomas or certificates.

Applicants to the program who are transferring from another faculty within the University of Victoria must submit to the Director of Records Services by March 31: (1) a School of Child and Youth Care Application Form, (2) Letter of Intent outlining the applicant's past experience and career objectives.

It is strongly recommended that applicants for the program have a current first aid certificate.

After having completed one or more years in the School of Child and Youth Care, a student may apply to the School for a one year leave of absence. The student must consult the School of Child and Youth Care concerning possible problems as a result of the leave of absence. The student must have approval for the leave of absence in advance of taking leave.

STANDING

Students whose sessional grade point average falls below 3.00 or who fail to receive a C+ grade or higher in any core Child and Youth Care or other required course may be required to withdraw from the program.

In the province of British Columbia, as well as a number of other Canadian provinces, a Criminal Records Check is a prepracticum and preemployment requirement of many agencies with clients who are classified as "vulnerable people" (e.g., children, the mentally and/or physically handicapped, etc.). Please be advised that a criminal record may limit practicum placement and employment opportunities in the field of Child and Youth Care.

REQUIREMENTS

The following academic program is designed to provide professional education and specialized practical education and training within a basic liberal arts education. Upon admission to the School of Child and Youth Care (Second year), students are advised to consult with the Admissions Coordinator on course selection prior to course registration.

Core courses are normally restricted to students in Child and Youth Care and may be taken by students outside the School only with permission of the instructor.

FIRST YEAR (introductory year prior to admission to School of Child and Youth Care):

Required:

Three units of English in consultation with the English Department. (Students usually select from ENGL 115, 116, 121, 122)

Three units of introductory psychology (normally PSYC 100 or its equivalent)

Suggested Electives

6-9 units of courses

Child and Youth Care 201 is strongly recommended for students considering entering the School of Child and Youth Care. For further suitable first or second year electives see examples listed under Second Year.

SECOND YEAR:

Required:

CYC 200A, 200B, 201 and 252

Three units of child and adolescent and/or lifespan development. These are normally PSYC 333A/B or Education-D 305

Suggested Electives:

4½ units selected according to the student's interests and career goals. The following list is meant to serve as a guide to assist in the selection of courses. Consult the University Calendar for other options.

First and Second Year Electives

Examples of suitable First Year and Second Year general electives are:

Arts and Science
- ANTH 100 or 200 level course
- MICR 101
- BIOC 201
- BIOL 150, or any 200 level course
- CSC 100
- ENGL — a 200 level course
- HIST 205, 349
- LING 100, 250, or 370
- MATH 151 and 102
- PHIL 100 or 269
- POLI 100, 202
- PSYC 200, 220, 230, 240, 250, or 311A, 311B and 312
- SOCI 103, 203

Education
- AE 103
- ED-D 300
- ME — a 100 or 200 level course
- PE — a 100 or 200 level course

Fine Arts
- MUS 100 or 200
- THEA 181 or other 100 or 200 level course
- ART 100 or 200 level course

Human and Social Development
- SOCW 200B

THIRD YEAR:

Required:
- CYC 301
- CYC 310
- CYC 338
- CYC 375
- CYC 376

Electives: 1½ units

FOURTH YEAR:

Required:
- CYC 410
- CYC 421
- CYC 422
- CYC 474, or
- CYC 475, or
- CYC 476

(one of the 474, 475, 476 series is required)

Fourth Year Electives: 6 units

Areas of Interest:

The School of Child and Youth Care normally offers elective courses, focused on areas of interest, during the spring and summer. Areas of interest, with specific examples for student choice, include:

Age Groups — infancy, early childhood, preadolescence, adolescence

Development Needs — physical, emotional, intellectual/cognitive, social adaptation, family functioning
Child and Youth Care Settings — preschool/day care***, school, recreation, hospital, community based programs in family/home.
Professional Issues — ethics, communication skills, self awareness, knowledge of social services, professionalism

*** Students can include in their program of electives all courses necessary for licensing as a Preschool Day Care Supervisor and a Special Needs Supervisor. Students interested should contact the Practica or Admissions Coordinator to ensure appropriate selection of courses.

The following is a list of courses which relate to the areas of interest mentioned above. This list is meant to serve as a guide for the selection of electives. It is not meant to be exclusive. Students are encouraged to review the full range of university offerings.

Arts and Science
ANTH 312, 322, 335, 336, 339A, 339B
PSYC 250, 311A, 311B, 312, 313, 315, 415, 430, 436, 450
PHIL 331
SOCI 301, 335, 445

Education
ED-B 316, 317, 331, 339, 341, 440, 441; ED-D 306, 405 406, 410, 411, 414, 415, 417, 433, 434

Human and Social Development
CYC 460, 474, 475, 476
CYC (SOCW) 350A
FHSD 400, 401 (see p.235)
HINF 215A, 240

PROGRAM DEVELOPMENT COMMITTEES

Students in the School of Child and Youth Care have made, and are expected to continue to make, through their participation in school activities, significant contributions to program development and the field of child and youth care. All School registrants are urged, wherever possible, to reserve Wednesday, 12:30-1:30 p.m. for committees, forums and other planning purposes.

COURSES

Normally CYC 201 and 350A are open to students from other Schools or Faculties.

(Course offering codes: Y = Sept.-Apr., F = Sept.-Dec., S = Jan.-Apr., K = May-Aug., NO = Not offered, this session)

Courses

CYC 201 (1½) INTRODUCTION TO PROFESSIONAL CHILD AND YOUTH CARE
This course presents an overview of the child and youth care field. It is a required course for program students, however it is also available for nonprogram students. Content includes a survey of the history of the profession and the role of the child and youth care practitioner across a broad spectrum of settings. FS(3-0)

CYC 200A (1½) THEORETICAL FOUNDATIONS IN CHILD AND YOUTH CARE
This course introduces theories of behaviour change, a systems orientation to personal and organizational change, and a normative developmental approach as a basis for developing a personal/professional theoretical perspective for child and youth care practice. F(3-0)

CYC 200B (1½) PROFESSIONAL FOUNDATIONS FOR CHILD AND YOUTH CARE
Child and Youth Care professional practice issues are explored within the context of ethics and standards of practice in child and youth care. The balance of the course focuses on the development of professional identity and the professional skills requisite for responsible practice, e.g., professional writing, oral presentations. S(3-0)

CYC 252 (formerly 352) (3) FUNDAMENTALS OF CHANGE IN CHILD AND YOUTH CARE PRACTICE
This course focuses on facilitating purposive change in the lives of children and youths involved in a broad spectrum of group care and community based settings. The use of communication skills and helping strategies, and the development of therapeutic relationships are explored in relation to the development of self and core elements of child and youth care practice. (Restricted to students in the School of Child and Youth Care or by permission of the Director) (Grading: INP (Distance Education only); letter grade) Y(3-0)

CYC 260 (1½ or 3) SPECIAL TOPICS IN CHILD AND YOUTH CARE
This course provides an opportunity to examine selected current issues in child and youth care. (With approval of a faculty adviser, this course may be taken more than once for credit) (3-0)

CYC 290 (1½ or 3) DIRECTED STUDIES IN CHILD AND YOUTH CARE
This course allows for research projects, additional course work or directed reading in a specified area and is intended primarily to assist students transferring from other institutions or programs.

CYC 301 (3, formerly 4½) PROFESSIONAL CHILD AND YOUTH CARE PRACTICE: THEORY AND APPLICATION
This course integrates theory and practice in the application of child and youth care by focussing on issues and techniques in assessment, case planning and intervention; major therapeutic approaches and their associated philosophies, goals, strategies and techniques; practical models for case consultation, presentation and evaluation. Students will demonstrate competency in these professional practice areas, real or simulated, and analyze the relationship between professional knowledge, skills, values and styles. (*Prerequisite:* 200A and 252) Y(3-1-2)

CYC 310 (formerly 210A/B) (4½ formerly 3) SUPERVISED PRACTICUM
Students are required to work directly with children/youths in a supervised practice situation in order to promote professional skill acquisition and integration, emphasis is placed on observation and recording skills, understanding the structure and functioning of a service agency, and fostering the student's awareness of his or her functioning in relation to children, youth and agency workers. Attention will also be given to developing beginning level case planning, intervention and case presentation skills with both a one to one and a group focus. (Enrollment restricted to students in the School of Child and Youth Care) (*Prerequisite:* 200A, 200B and 252). Y(1-6)

CYC 338 (3) APPLIED DEVELOPMENTAL PSYCHOLOGY
This course focuses on the clinical application of contemporary theory in child and youth development. Content examines group and individual practice issues in relation to specific environments. An emphasis is placed on current developmental research and its application to program design and professional practice. (*Prerequisite:* PSYCH 333 A & B or equivalent) Y(3-0)

CYC 350A (formerly 350) (SOCW 350A) (1½) LAW AND SOCIAL SERVICES
The objective is to provide students in Child and Youth Care and Social Work with an understanding of the Law as an expression of social policy, and of the processes by which laws are developed, enacted and changed; Family Law and the Family Courts, with special reference to laws affecting children; human rights as they apply to social services; the organization of legal services and the legal accountability and liabilities of social workers, child and youth care workers, and others in the social service field. (*Prerequisite:* Third year standing or permission of instructor) Y(3-0)

CYC 360 (1½ or 3) SPECIAL TOPICS IN CHILD AND YOUTH CARE
This course provides an opportunity to examine selected current issues in child and youth care. (With approval of a faculty adviser, this course may be taken more than once for credit) (3-0)

CYC 375 (1½) ACTIVITY GROUP WORK WITH CHILDREN AND YOUTH
Focuses on the integration of developmental approaches in the organization of groups with children and youth. Strategies related to the planning and management of activity groups utilizing a variety of approaches are presented. (*Prerequisite:* CYC 200A) (3-0)

CYC 376 (1½) THEORY OF CHILD AND YOUTH CARE PRACTICE WITH FAMILIES
This course presents conceptual frameworks and models for understanding family functioning and parenting. The child and youth care service settings in which family work occurs are identified; family assessment methodologies and interventions which are appropriate to Child and Youth Care Workers in these settings are presented. (*Prerequisite:* 200A) (3-0)

CYC 390 (1½ or 3) DIRECTED STUDIES IN CHILD AND YOUTH CARE
Research projects, directed readings, or additional course work in a specified area. (May be taken more than once for credit, provided the course content is different from that previously taken)

CYC 410 (4½, formerly 3) ADVANCED SUPERVISED PRACTICUM
This supervised practicum focuses on the student's chosen professional area of interest and provides an opportunity to apply case planning, intervention and evaluation skills at an advanced level. Professional consultation, clinical functioning and the integration of theory and practice, are emphasized. Ten hours per week in the practicum setting and one hour per week in a seminar. (Restricted to Child and Youth Care students in their fourth year of study) (*Prerequisites:* 301, 252 and 310) Y(1-10)

CYC 421 (formerly half of 420) (1½) RESEARCH METHODS IN CHILD AND YOUTH CARE
This course introduces students to ways in which knowledge in the child and youth care field is developed. The course provides students with the skills and information necessary to access and critique literature in the field of child and youth care. Further, the course prepares students to appreciate and understand basic issues, designs, and statistical techniques in child and youth care research. (3-0)

CYC 422 (formerly half of 420) (1½) APPLICATIONS OF RESEARCH IN CHILD AND YOUTH CARE PRACTICE
In this course students are required, within a research practitioner context, to develop an applied research proposal which addresses a problem in the field of child and youth care. Students are also presented with selected professional issues pertinent to child and youth care practice) (*Prerequisite:* 421) (3-0)

CYC 460 (1½ or 3) SPECIAL TOPICS IN CHILD AND YOUTH CARE
This course provides an opportunity to examine selected current issues in child and youth and family care. (With approval of a faculty adviser, may be taken more than once for credit) (3-0)

CYC 474 (1½) CHILD AND YOUTH CARE PRACTICE WITH INDIVIDUALS
This course focuses on the development of skills in working with individual children and youth. Students are required to apply behavioural change theories in a laboratory environment. They will receive feedback on their application of interventions in child and youth care practice. (*Pre- or corequisite:* 301) (3-0)

CYC 475 (1½) DISCUSSION AND COUNSELLING GROUPS WITH CHILDREN AND YOUTH
This course focuses on developing the knowledge and skills required for the organizing and managing of groups with children and youth. Students are required to apply theory through group interventions and will receive feedback on their work in a laboratory environment. Students are required to lead a group of children or youths during the course. (*Prerequisite:* 301 and 375) (3-0)

CYC 476 (1½) CHILD AND YOUTH CARE PRACTICE WITH FAMILIES
This course focuses on the development of skills related to child and youth care practice with families. Students are required to apply theory through interventions for children, parents and their families based on the assessed needs and identified goals. Students work in a laboratory environment and receive feedback on their approaches and style in working with families. (*Prerequisite:* 301 and 376) (3-0)

CYC 490 (1½ or 3) DIRECTED STUDIES IN CHILD AND YOUTH CARE
Research projects, directed reading, or additional course work in a specificied area. (May be taken more than once for credit, provided the course content is different from that previously taken)

SCHOOL OF HEALTH INFORMATION SCIENCE

Denis J. Protti, B.Sc. (Alta.), M.Sc. (Man.), Professor and Director of the School
Gerhard W. Brauer, B.A. (U. of Vic.), M.A. (Brit. Col.), Professor
Jochen R. Moehr, Staatsexamen, Dr. med. (Marb.), Habilitation Medizinische Informatik (Hannover Med. School), Professor
Paul D. Fisher, B.Sc. (U. of Vic.), M.Sc., Ph.D. (Alta.), Assistant Professor
Kirk B. McGowan, B.Sc. (U. of Vic.), Programmer Analyst
Lawrence R. Scott, B.Sc., B.Sc. (U. of Vic.), Cooperative Education Coordinator

Visiting and Adjunct Appointments:

Kathryn J. Hannah, R.N., B.S.N., M. S.N. (Med. Coll. of Georgia), Ph.D. (Alta.), Adjunct Professor (1989-91)
Kenneth R. Thornton, B.Sc., M.B.Ch.B. (Leeds), Visiting Professor (1989-91)
Gerritt W. Clements, B.A. (Calg.), LL.B. (Alta.), Adjunct Associate Professor (1990-91)
Fernande P. Harrison, B.Sc., M.H.S. (Alta.), Adjunct Associate Professor (1990-92)

COMMUNITY ADVISORY COUNCIL
Dr. J.W. Dutton, Cardiovascular Surgeon, Victoria
Mr. M. Halkett, Director of Hospital Services, Capital Regional District, Victoria
Ms. M. Hall, Manager Health Care, Stevenson, Kellogg, Ernst & Whinney, Victoria
Mrs. F. Harrison, Vice-President Patient Care, Greater Victoria Hospital Society, Victoria
Mrs. L.A. King, Director, Quality Assurance, Victoria General Hospital
Mr. W. Lawrence, Director of Research and Evaluation, Ministry of Health, Victoria
Mr. C. Lovelace, Assistant Deputy Minister, Institutional Services, Ministry of Health, Victoria
Dr. G. Martin, Chief, Clinical Pathology Service, Royal Inland Hospital, Kamloops
Mr. P. McAllen, General Manager, Computer Services, B.C. Health Association, Vancouver
Mr. R. McDermit, Chief Executive Officer, St. John Ambulance, Vancouver
Mr. D. Mullins, Marketing Manager, IBM Canada Ltd., Vancouver
Mr. C. Rowe, Vice-President Community Relations, Greater Victoria Hospital Society
Mr. M. Telford, Executive Director, Nanaimo Regional General Hospital, Nanaimo, B.C.

PROGRAM

Health Information Science is the study of the nature of information and its processing, application and impact within a health care system. Health Information Science integrates management sciences, computing and communications technologies, and information systems with formal study of health care systems. The Bachelor of Science in Health Information Science is a four year Cooperative Education program consisting of an introductory first year, followed by three years in the School itself.

ADMISSION REQUIREMENTS

Students may be formally admitted to the School of Health Information Science upon successful completion of 15 units of appropriate university level credit.

Admission to the School of Health Information Science is limited to approximately 30 students per year. Students are selected on the basis of grades, a personal written submission and an interview. A second class average in the immediately preceding 15 units of university level studies and completion of the prerequisite courses are normally required for admission into the School.

Prospective students are encouraged to consult the School prior to or during their first year of University studies.

Applicants transferring from postsecondary institutions must submit an Application for Admission to the University and a Health Information Science Application Form to the Director of Admission Services by April 30. Forms are available from Admission Services.

University of Victoria students (those seeking admission from another faculty and those previously enrolled in the Program) must submit an Application for Reregistration and a Health Information Science Application Form to Records Services by April 30.

Credit for previous postsecondary studies may be granted as appropriate. Applicants seeking advanced placement are advised to read the minimum degree requirements on page 20 of the Calendar.

STANDING

Students who do not maintain a sessional grade point average of 3.50 or better will normally be required to withdraw from the School.

A student in the School of Health Information Science should inform the Director of any intended prolonged absence. Students should not assume that readmission to the School is guaranteed.

COOPERATIVE EDUCATION

Please refer to page 32 of the Calendar for the general description of Cooperative Education.

The distinguishing feature of the Cooperative Education approach is the inclusion, as an integral part of the degree, of four Work Terms of approximately four months duration each (13 weeks minimum). These Work Terms begin after the student's Second Year and normally alternate with formal academic terms in Health Information Science. Students with prior relevant work experience may, on admission, apply for exemption from the first Work Term via a formal Work Term Challenge (see page 32).

During a Work Term, students are employed in a full time, health care related job in either the public or private sector. For all practical purposes, Cooperative Education students on Work Terms are regular employees and receive salary and benefits in accordance with the employer's policy. Both the employer and the University evaluate the student's performance on each Work Term. Each Work Term is recorded on the student's Official Transcript of Academic Record (as COM, N, or F). Details of Work Terms are recorded on the Record of Work Terms which is attached to the Academic Record.

PROGRAM REQUIREMENTS

To meet the requirements of a major in Health Information Science, students must complete 60 units which include a core of 39 units, a minimum of 7½ units selected from one or more of the Areas of Concentration, 13½ units of electives, and a minimum of four Work Terms (students with prior relevant work experience may be required to complete only three Work Terms). COOP work term locations are across Canada and students must be prepared to accept placement outside of Victoria. Students are normally expected to select an Area of Concentration in their Second Year of studies in order to satisfy the prerequisites for Third and Fourth year courses.

The following courses (except HINF 161/162), or their equivalents, are prerequisite to admission to the School:

First Year (Pre-Health Information Science Year):

Although not a prerequisite for admission, students wishing to enter the School are strongly encouraged to take HINF 161/162 in the first year, i.e. prior to admission.

C SC 110	(1½)	Computer Programming: I
or		
C SC 112	(1½)	Introduction to Computer Science
C SC 115	(1½)	Computer Programming: II
ENGL	(3)	English 115 and any other English course
HINF 161	(1½)	Introduction to Health Information Science: I
HINF 162	(1½)	Introduction to Health Information Science: II
MATH 151	(1½)	Finite Mathematics
MATH 102	(1½)	Calculus for Students in the Social Sciences
or		
MATH 100	(1½)	Calculus: I
3 units of electives		

Students may not receive credit for both CSC 112 and HINF 162. Students with credit in CSC 112 will normally be required to take a proficiency test in the use of computer equipment specified by the School.

Second Year: First Term

CSC 275	(1½)	File Structures for Data Processing
HINF 240	(1½)	Introduction to Health Care Delivery
One of the following:		
STAT 250	(1½)	Introduction to Statistics: I
or		
BIOL 250	(1½)	Biometrics: I
or		
ECON 240	(1½)	Descriptive Statistics
Electives	(3)	

Second Year: Second Term

CSC 375	(1½)	Systems Analysis
ENGL 225	(1½)	Technical Communications: Written and Verbal
HINF 270	(1½)	Medical Methodology
One of the following:		
STAT 251	(1½)	Introduction to Statistics: II
or		
BIOL 251	(1½)	Biometrics: II
or		
ECON 340	(1½)	Statistical Inference
Elective	(1½)	

Second Year: May-August

COOP work term

First and Second Year Electives:

Suggested electives in First and Second Year include:

COMM 120	(1½)	Principles of Organizational Behaviour
COMM 253	(1½)	Financial Accounting
COMM 254	(1½)	Managerial Accounting
CSC 225	(1½)	Digital Structures
CSC 230	(1½)	Computer Systems and Assembly Language
CSC 250	(1½)	Digital Logic and Computer Organization
ECON 201	(1½)	Principles of Microeconomics
ECON 202	(1½)	Principles of Macroeconomics
MATH 222	(1½)	Discrete Mathematics
PE 241A	(1½)	Introduction to Human Cellular Physiology
PHIL 201	(1½)	Applied Logic: I

PHIL 222A	(1½)	Philosophy of Science: Methodological Issues
PHIL 222B	(1½)	Philosophy of Science: Social and Ethical Issues
SOCI 371	(1½)	Statistical Analysis in Sociology I
THEA 150	(1½)	Speech Communication

Third Year: First Term

HINF 300	(1½)	Health Information Systems
HINF 351	(1½)	Hospital Information Systems: I
HINF 460	(1½)	Quality Assurance & Ethics
Electives	(3)	

Third Year: Second Term

COOP work term

Third Year: May-August

HINF 325	(1½)	Fiscal Management in Health Services
HINF 330	(1½)	Health Care Law
HINF 340	(1½)	Principles of Community Health
HINF 352	(1½)	Hospital Information Systems: II
HINF 380	(1½)	Epidemiology: I

Fourth Year: First Term

COOP work term

Fourth Year: Second Term

HINF 415	(1½)	Patient Care Support Systems
HINF 440	(1½)	Health Care Systems
HINF 445	(1½)	Distributed Processing in Health Care
Electives	(3)	

Fourth Year: May-August

COOP work term

Fifth Year: First Term

Electives (7½)

Three Areas of Concentration are identified in the Third and Fourth Years. Students normally select a minimum of 7½ units from one or more of the Areas of Concentration to complete their degree. Other senior level courses may be taken with the approval of the Director.

Health Information Science students require permission of the Dean of Engineering to take Engineering courses.

Area of Concentration — Administration

ADMN 406	(1½)	Organizational Analysis
ADMN 431	(1½)	Personnel Management in the Public Sector
FHSD 400	(1½)	Policy Making in the Human Services
FHSD 401	(1½)	Women in the Human Services
HINF 410	(1½)	Administrative Support Systems
NURS 450	(1½)	Administration in Health Services
PHIL 330	(1½)	Professional and Business Ethics
PHIL 331	(1½)	Issues in Biomedical Ethics
PSYC 334a	(1½)	Personnel and Organizational Psychology
SOCW 450	(1½)	Administration in the Human Services

Area of Concentration — Health Services Research

ADMN 437	(1½)	Public Sector Program Evaluation
ANTH 312	(1½)	Medical Anthropology
ECON 317	(1½)	The Economics of Canadian Health Care
ECON 416	(1½)	Cost Benefit Analysis: Principles and Application
HINF 480	(1½)	Epidemiology: II
PHIL 332	(1½)	Philosophy and Technology
SOCI 445	(1½)	Sociology in Health and Medicine
STAT 354	(1½)	Sampling Techniques
STAT 453	(1½)	The Design and Analysis of Experiments
SOCI 471	(1½)	Statistical Analysis in Sociology II

Area of Concentration — Medical Informatics

CENG 420	(1½)	Artificial Intelligence
CENG 485	(1½)	Pattern Recognition
C SC 350	(1½)	Computer Architecture
C SC 360	(1½)	Introduction to Operating Systems
C SC 450	(1½)	Computer Communications and Networks
C SC 470	(1½)	Database Systems
HINF 385	(1½)	Computer Applications in Nursing
HINF 450	(1½)	Software Engineering Application in Health Care

COURSES

Students from other Schools and Faculties may take 3rd and 4th year Health Information Science courses on approval of the Director and their respective Director or Chair. If enrollment restrictions are necessary, preference will be given to students registered in the Faculty of Human and Social Development.

(Course offering codes: Y = Sept.-Apr., F = Sept.-Dec., S = Jan.-Apr., K = May-Aug., NO = Not offered, this session)

HINF 161 (1½) INTRODUCTION TO HEALTH INFORMATION SCIENCE: I
An introduction to the principles of information, organization, and systems theory, to the forms of technology used in health care delivery, to the role that technology plays in shaping the health care delivery system and the associated ethical issues. F(3-1)

HINF 162 (1½) INTRODUCTION TO HEALTH INFORMATION SCIENCE: II
An introduction to the knowledge and skills expected of a professional working in the field of Health Information Science. The basic concepts of the field are established, the methodologies used are investigated, the organizational settings are identified, and the people involved are introduced. (*Prerequisite:* 161) S(2-2)

HINF 240 (1½) INTRODUCTION TO HEALTH CARE DELIVERY
An overview of the organization, operation and administration of the Canadian health care delivery system which provides the student with an understanding of how the multiple components are interrelated and integrated. F(3-2)

HINF 270 (1½) MEDICAL METHODOLOGY
The process of clinical decision making in diagnosis, treatment planning, and prognosis. Alternate models for clinical decision making using subjective and objective data and information. Integrates the principles of physiology and pathophysiology. (*Prerequisite:* 240) S(3-1)

HINF 300 (1½) HEALTH INFORMATION SYSTEMS
The study of General Systems Theory, particularly as it applies to the information required in the management of systems. The importance of structuring and managing data using database management technology. The application of these principles to information systems in varying health care organizations. (*Prerequisite:* Health Information Science 162 or permission from the Director.) F(3-2)

HINF 325 (1½) FISCAL MANAGEMENT IN HEALTH SERVICES
An examination of the systems and financial reporting required to support management decision making in health care delivery. Topics include institutional accounting and budgeting, provincial and federal government requirements, clinical program budgeting. (*Prerequisite:* 300) K(3-0)

HINF 330 (1½) LEGAL ISSUES IN HEALTH INFORMATICS
This course introduces Health Information Science students to legal aspects of their profession, including aspects of confidentiality, liability and contractual issues. Students will gain an appreciation for legal terminology, reasoning, and processes as well as basic principles of law which apply to and govern the delivery of health informatics in Canada. (Not open to students with credit in FHSD 410) K(3-0)

HINF 340 (1½) PRINCIPLES OF COMMUNITY HEALTH
Develops an appreciation of the principles and practice of health protection and promotion in the community, including consideration of occupational and environmental health concerns. Particular attention is

given to the changing roles and functions of health professionals and to the investigative and service delivery aspects of community medicine. May in some years focus on issues in the delivery of health care in Third World countries. (*Prerequisite:* 270) K(3-0)

HINF 351 (1½) HOSPITAL INFORMATION SYSTEMS: I
This course simulates what a hospital normally goes through when it conceptualizes the need for a hospital information system, identifies its goals and objectives for the system, prepares a Request for Proposal (RFP), and selects a particular system. The various methodologies and dynamics involved are investigated. (*Prerequisite:* 270; *Corequisite:* 300) F(2-2)

HINF 352 (1½) HOSPITAL INFORMATION SYSTEMS: II
Provides a comprehensive coverage of the architectural components of hospital information systems and of alternatives for their realization. (*Prerequisite:* 351) K(4-0)

HINF 380 (1½) EPIDEMIOLOGY: I
An introduction to the principles of epidemiological investigation in the monitoring of disease occurrence, disease control, and health program evaluation. (*Prerequisites:* 270 and 3 units of approved statistics courses, see "credit limit" on page 14) K(3-1)

HINF 385 (NURS 485) (1½) COMPUTER APPLICATIONS IN NURSING
This interdisciplinary course for Nursing and Health Information Science students is designed to facilitate the exploration of the impact of information technology in relation to the nursing profession. Course content focuses on computer applications and related issues in nursing practice, nursing administration, nursing education, and nursing research. F(3-0)

HINF 410 (1½) ADMINISTRATIVE SUPPORT SYSTEMS
An in depth study of the evolving organization structures in the management of information resources in health care facilities. Topics include: characteristics and role of the Chief Information Officer, status and future implications of end-user computing, critical importance of managing the human side of information systems. (*Prerequisite:* 325) S(3-0)

HINF 415 (1½) PATIENT CARE SUPPORT SYSTEMS
Provides a thorough coverage of concepts, methodologies and techniques available to support patient care processes through the use of information technology. Includes a review of factual and patient information systems, signal and pattern processing applications, decision support, simulation, and education and training applications. (*Prerequisite:* 352) S(2-1)

HINF 440 (1½) HEALTH CARE SYSTEMS
An examination of the structure and function of the current health delivery system, particularly from the point of view of how information flow influences health care trends and policy formulation. Emphasis is on community, regional, provincial and national information flows. (*Prerequisite:* 340) S(3-0)

HINF 445 (1½) DISTRIBUTED PROCESSING IN HEALTH CARE
A management perspective to data communications technology, networks, and distributed processing. Emphasis is on examining the impact of emerging communications microcomputer technology on information systems in varying sectors of the health care delivery system. (*Prerequisite:* 300) S(2-2)

HINF 450 (1½) SYSTEMS AND SOFTWARE ENGINEERING IN HEALTH CARE
Provides a thorough coverage of principles of systems and software engineering in health care and introduces methodologies and techniques for design, production, maintenance and evaluation of health information systems. (*Prerequisite:* 352) S(2-2)

HINF 460 (1½) QUALITY ASSURANCE AND ETHICS
Provides an in depth assessment of the quality, interpretation and use of health data in the area of direct patient care. Students analyze the data elements and the methodologies used to assess such factors as quality, social impact and clinical significance. The ethical and confidentiality issues encountered are examined. (*Prerequisite:* 270) F(3-0)

HINF 480 (1½) EPIDEMIOLOGY IN HEALTH SERVICES MANAGEMENT
An examination of the principles and methods of managerial epidemiology. The course focuses on the design, implementation and evaluation of epidemiological analyses as applied to management in the health and social services, including the role of epidemiology in health services planning and policy formulation, health status indicators, outcome measurement and utilization analysis. Emphasis is placed on the ability to write effective issue papers for senior management and granting agencies. (*Prerequisite:* 380) F(3-0)

HINF 490 (1½ or 3) DIRECTED STUDY
Students wishing to pursue a course of directed readings or of a directed project should consult with a faculty member willing to supervise such a course, formulate a proposal describing both the content of the course and a suitable means of evaluating the student's work. The proposal must then receive the approval of the Director. (May be taken more than once for credit provided the course content is different from that previously taken.) FSK

HINF 491 (1½) TOPICS IN HEALTH INFORMATION SCIENCE
Through this course the Program offers advanced topics in various areas of Health Information Science. Information on the topics available in any given year will be available from the Director. Entry to this course will be restricted to third and fourth year students who meet the prerequisite specified for the topic to be offered. (May be taken more than once for credit, provided the course content is different from that previously taken) FS(3-0)

SCHOOL OF NURSING

Carolyn Attridge, B.Sc.N. (McM.), M.N. (Wash.), M.A., Ph.D. (Tor.), Associate Professor and Director of the School (to June 30, 1991)
Jessie Mantle, B.N. (McG.), M.S.N. (Calif., San Fran.), Professor
John Howard Brunt, B.A. (U. of Florida), A.D.N. (U. of Vermont), M.Sc.N. (Yale), Ph.D. (Calg.), Associate Professor
Jean Isobel Dawson, B.Sc.N. (McG.), M.Sc.N. (St. Louis), M.A.,Ph.D. (Tor.), Associate Professor
Elaine M. Gallagher, B.Sc. (Windsor), M.Sc. (Duke), Ph.D. (S. Fraser), Associate Professor
Marilyn F. Jackson, B.N. (Man.), M.Ed. (Tor.), Associate Professor
Marcia D. Hills, B.Sc. (Alta.), M.A., Ph.D. (U. of Vic.), Assistant Professor and Outreach Coordinator
A. Elizabeth Lindsey, B.S.N., M.A. (U. of Vic.), Assistant Professor
Marilyn Brown, B.A. (Wat.), Program Assistant, Extension Program
Faith B. Collins, B.Sc.N. (Mt. St. Vin.), B.A., M.Ed., Ed.D. (Seattle), University Extension Program Coordinator

Visiting and Adjunct Appointments:

Jeanette Funke-Furber, B.N. (McG.), M.Sc. (Colorado), Adjunct Professor
Fernande Harrison, B.Sc., M.H.S. (Alta.), Adjunct Professor
Patricia M. Coward, B. Sc.N. (Tor.), M.N. (Alta.), Adjunct Assistant Professor (1990-92)
William H. Dyson, B.Sc. (Moravian), M.A., Ph.D. (Kan.), M.D. (McM.), Adjunct Associate Professor (1990-92)
Pat Fullerton, Adjunct Assistant Professor (1990-92)

PROGRAM OFFERED

The School of Nursing offers a Baccalaureate Program for Registered Nurses consisting of 34½ units, predominantly at the third and fourth year level, and leading to the degree of Bachelor of Science in Nursing

(B.S.N.). The program will take at least two calendar years to complete if taken on a full-time basis.

The basic purpose of the B.S.N. program is to prepare students with the knowledge, skills, methods, and values necessary to practise nursing with individuals, groups and communities wherever nursing takes place. Students learn in a variety of settings, for example, commmunity health agencies, wellness clinics, acute and extended care hospitals, within the context of today's changing health care system. During the program, students have the opportunity to study nursing topics of special interests. The program builds upon previous education and experience in nursing. It is also intended to provide the basic competencies to permit graduates to develop the additional skills needed to move into leadership positions.

Students may proceed toward their degree on a full time or part time basis.

This may be accomplished by:
— attending courses on campus and/or
— attending designated college sites and/or
— participating in distance education

Distance education courses are available on a planned rotation and scheduled for three semesters a year. Formats for delivery of distance education courses vary from direct face to face interaction between teachers and learners to a more media-based format involving print, audio, television and teleconferencing. Some are offered in cooperation with the Division of University Extension and Community Relations in the evening or on weekends during the Winter Session (September-April) and in the daytime or late afternoon during May-June and July-August. Other courses may be taken through the Open Learning Agency or other post secondary institutions with permission of the School. Distance courses are subject to the availability of budget, qualified faculty and clinical resources.

ADMISSION REQUIREMENTS

B.S.N. for Registered Nurses:

a) Active practising registration as a Registered Nurse in British Columbia (or the equivalent in other Canadian jurisdictions in which the student is taking the program).
b) Two current references, preferably from persons in a supervisory capacity, indicating a competent standard of nursing practice.
c) Demonstrated academic proficiency, e.g. a score of 500 on the Canadian Nurses Association Testing Service Examinations and/or completion of 1½ units of university work, transferrable to the University of Victoria at the 200 level or higher with a minimum grade of B-.

NOTE: (1) Since enrollment in the program is limited, all applicants are individually assessed by the School of Nursing.

NOTE : (2) Applications for admission for September entry to the program for both on and off campus students must be submitted by April 30. Applications for January entry and for May entry must be submitted by October 31 and February 28 respectively. Normally, the January and May entry points apply to distance students only.

PROGRAM REQUIREMENTS

Applicants must meet the general University requirements on pages 7-20 of this Calendar. Of special note are the following regulations:

1. All students must meet the English requirement as set forth on page 13 of the Calendar.
2. All students must maintain a cumulative grade point average of 3.50 to proceed through the program and graduate. If below this level, students will be required to discuss their program with the Director of the School and may be required to withdraw.
3. All students in the School of Nursing will follow the F.H.S.D. Guidelines for Professional Conduct (see pg. 294) and will be subject to the provisions of the code of ethics as stated by the Registered Nurses' Association of B.C. (or the provincial/territorial equivalent in which they practice).
4. Students admitted to the B.S.N. program *after May 31, 1990,* must complete 34.5 units, 30 of which must normally be at the 300 level or higher. The remaining 4.5 units may be below the 300 level.
5. Students admitted to the B.S.N. program may be permitted, with the approval of the Dean of Human and Social Development, to present up to 13½ units of courses completed through institutions other than the University of Victoria. Students are advised to ensure the acceptability of such courses by the School of Nursing before enrolling in them.
6. Students admitted to the B.S.N. program after August, 1989, may be eligible to receive up to 3 units of transfer credit for completed college or university level post-basic certificate and/or diploma programs. These units will be considered part of, and not in addition to, the 13½ units permitted in item 5 above.
7. The program must normally be completed within six calendar years from the date of admission.
8. Students must maintain active practising registration as a registered nurse in British Columbia throughout the duration of the program (or the equivalent in other jurisdictions in which the student is taking the program).

Practica:

Applicants are advised that clinical experience in health care agencies, in and outside of Victoria, is an essential part of the Nursing Program. Students must meet the registration or licensure requirements of the jurisdiction in which they have their clinical practica. It may not be possible to arrange practica in the location and at the time which is preferred by students. Students must also provide their own transportation. Applicants are referred to page 294 of the Calendar for regulations concerning practica.

Baccalaureate Program for Registered Nurses: (Students admitted to the program *after January 31, 1988* will normally take the following courses:)

Year 3

NURS 306	(3)
NURS 307	(3)
NURS 308	(1½)
NURS 309	(1½)
NURS 310 (formerly 402)	(1½)
* SOCI 305	(3)

Year 4

NURS 401	(1½)
NURS 404	(1½)
NURS 406 formerly 303)	(3)
NURS 415	(3)
NURS 450	(1½)
Three units from the following: NURS 480, NURS 481, NURS 482, NURS 483, NURS 485	(3)
* SOCI 371	(1½)
PHIL 331(1½)	
One of the following courses pertaining to the elderly: PSYC 333B, *SOCI 385, *PE 449	(1½)
** Elective(s): Any course(s), at the 200 level or above outside the School	(3)

* Alternative courses to meet these requirements may be chosen in consultation with the Director of the School or a designated faculty representative. Students taking SOCI 305 and SOCI 371 must ensure they have the required prerequisite (see page 130).

** Additional electives open to students in the Schools of Child Care, Health Information Science, Nursing, Public Administration, and Social Work are courses offered by the Faculty of Human and Social Development: Policy in the Human Services (FHSD 400) and Women in the Human Services (FHSD 401). (See page 296.)

NOTE: Students admitted to the program *prior to January 31, 1988,* will find their courses listed in the calendar of the year in which they were accepted into the School of Nursing. NURS 410 and 411 are retained in course descriptions below because they are still available by distance education.

COURSES

Courses offered by departments other than the School of Nursing are described under the appropriate heading in the Calendar. Students should note carefully any departmental prerequisites for courses. If prerequisites cannot be met, students are advised to consult with the appropriate department chair.

All courses are open to Nursing students only unless otherwise noted in the course description. Course challenges are not available for nursing courses.

(Course offering codes: Y = Sept.-Apr., F = Sept.-Dec., S = Jan.-Apr., K = May-Aug., NO = Not offered, this session)

NURS 301 (3) THEORIES AND CONCEPTS IN NURSING

This course investigates selected concepts, theories and nursing models which have application for individuals' health and illness situations. The foci of study are the individual within the context of the family and the practitioner within the context of the group. (Normally, program credit will not be granted for 301 and 306, 307, 308, or 309.) (Note: This course will not be offered on campus after 1987-88) NO(3-1)

NURS 302 (3) CLINICAL STUDIES IN NURSING

This course provides the student with an opportunity to develop skills in clinical problem solving, communication and health assessment. In a direct care practicum, students use these skills to apply the theory gained in 301. Practica sites include institutions and other selected settings. (Normally, program credit will not be granted for 302 and 306, 307, 308, or 309.) (*Pre- or corequisite:* 301) (Note: This course will not be offered on campus after 1987-88) NO(0-6)

NURS 306 (3) CLINICAL STUDIES: I

This course is an introduction to community based nursing theory and practice relevant, focusing on individuals and groups across the lifespan. Nursing's use of concepts such as health promotion and wellness are explored. The application of epidemiological methods in professional nursing practice are examined. A community health assessment is included in the clinical practicum. It is assumed that students are competent in the use of the nursing process. (*Pre- or corequisites:* 309, SOCI 305 or permission of the Director or designate) F(3-5-1)

NURS 307 (3) CLINICAL STUDIES: II

This course focuses on nursing theory and clinical practice relevant to nursing of the family across the lifespan. Students apply a family nursing framework in their clinical practicum, in which they work with healthy, at-risk and dysfunctional families including those with chronic illness and special health challenges. Concepts such as change and crisis as they apply to families are explored. (*Prerequisite:* 306; *Pre- or corequisites:* 309, SOCI 305 or permission of the Director or designate) S(3-5-1)

NURS 308 (1½) CONCEPT DEVELOPMENT IN NURSING PRACTICE

This course investigates the knowledge required to diagnose and manage selected clinical problems within the domain of nursing. For each diagnosis studied, relevant clinical research findings and theoretical formulations will be discussed. Diagnostic concepts will be selected from the available diagnostic classification systems. The course assumes that students have had experience in using the nursing process in practice. F(3-0)

NURS 309 (1½) COMMUNICATION IN NURSING

This course focuses on the study of effective interpersonal communication in the client-nurse and nurse-colleague relationships. Theories of interpersonal communication form the foundation for skill-building of a mutual, problem solving approach with clients and colleagues. Students will learn to establish, maintain and terminate effective helping relationships with individuals. Expectations are for competency in assessment, planning, and evaluation interviews and for enhanced skills in difficult client-nurse and nurse-colleague situations. S(3-0)

NURS 310 (formerly 402) (1½) THE TEACHING-LEARNING PROCESS IN HEALTH CARE

This course is designed to enable nurses and other health professionals to recognize and take advantage of health related client teaching opportunities in various health care environments. Emphasis is given to the assessment of learner characteristics, establishing objectives, selection and adaptation of teaching techniques appropriate to client situations and to the establishment of criteria for the evaluation of teaching effectiveness. (Open to students in Nursing and, with the instructor's permission, to other health professionals.) FS(3-0)

NURS 390 (1½ or 3) DIRECTED STUDIES

Directed readings, research projects or special studies in a specified area of interest. A proposal is developed in consultation with a faculty member and includes a plan for the evaluation of the student's work. The proposal must receive the approval of the Director before students are permitted to register. (Offered as resources permit.)

NURS 401 (1½) NURSING RESEARCH

This course is designed to introduce the student to the field of research in nursing, building upon an introductory level knowledge of statistics. Discussion of research design and its application to nursing, development of a design for research study in an area of interest, and critical analysis of selected nursing research studies by students comprise three components of the course. Teaching methods include lecture, seminar, and individual student advisement. (*Pre- or corequisite:* Introductory course in Statistics, e.g. SOCI 371, PSYC 300A, or other course approved by Director) FS(3-0)

NURS 404 (1½) PROFESSIONAL ISSUES IN NURSING AND HEALTH CARE

This course focuses on professional issues in nursing, including the role of individual nurses and the professional organizations in changing the health care delivery systems and in functioning with those systems. (*Prerequisite:* Fourth year standing or permission of the Director) S(3-0)

NURS 406 (formerly 303) (3) HEALTH SCIENCE

The contributions of modern science and the scientific method to the understanding of various disease states are reviewed. Students will acquire the ability to analyze current literature in various areas of basic science relevant to clinical practice and will pursue in depth an area of special interest arising from their practice. (Restricted to students in the B.S.N. program or, with the permission of the instructor as space permits, to other students with a suitable background.) Y(3-0)

NURS 410 (3) COMMUNITY HEALTH NURSING THEORY

This course focuses on theory and skills required for Community Health Nursing. Nursing theories and relevant concepts from public health and the social sciences form the basis for a population focused approach to nursing care. Emphasis is placed on the promotion of health and prevention of disease and disability in families and groups within the community. (Usually 410 and 411 are taken together.) (Normally, program credit will not be granted for 410 and 415 or 480.) (*Prerequisite:* 301, 302) (Note: This course offered through Distance Education only) Y(3-0)

NURS 411 (3) COMMUNITY HEALTH NURSING PRACTICE

In this course students practice the theory and skills of 410. Students work with field guides in a variety of community agencies to provide nursing care to families and groups in ways that consider course, student, agency and patient goals. Opportunities for both concurrent and block field experience are available. (Normally, program credit will not be granted for 411 and 415, 480.) (*Prerequisites:* 301 and 302; *Pre- or corequisite:* 410) (Note: This course offered through Distance Education only) (Grading: INP; lettergrade) Y(0-5-1)

NURS 415 (3) CLINICAL STUDIES: III

This course focuses on theories and skills necessary for population-based nursing care. Opportunities will be provided for students to participate in primary health care in health-related agencies, applying principles of teaching/learning, and program development, implementation, and evaluation. (Normally, program credit will not be granted for 415 and 410, 411.) (*Prerequisite:* 307, 310) (Note: This course will be offered for the first time in 1989-90) F(3-5-1)

NURS 450 (1½) ADMINISTRATION IN HEALTH SERVICES

The course examines various concepts in organization and management theory: the managerial process, the structure of organizations, and the management of conflict and change. These are discussed in relation to

service organizations. (This course will normally be restricted to students in the fourth year of Nursing, and to students with at least fourth year standing in other professional programs with the permission of the Director of the School of Nursing. Students may substitute SOCW 450 with the permission of the instructor of that course.) F(3-0)

NURS 480 (1½) ADVANCED NURSING: COMMUNITY HEALTH NURSING PRACTICE
This course involves in-depth study and practice in the area of health promotion and primary prevention as it relates to community health nursing. Students meet weekly in a scheduled seminar to discuss practice issues of mutual interest. May be offered every other year, or annually as resources permit. Students are advised to consult the School before registering. (*Prerequisite:* 410 or 415; or permission of the Director or designate) S(0-2-3)

NURS 481 (1½) ADVANCED NURSING: CLINICAL NURSING PRACTICE
This course involves in depth study and practice in specialized clinical areas other than community health. Content will vary from year to year. Students practice individually or in groups and will meet weekly in a scheduled seminar to discuss practice issues of mutual concern. Offered as resources permit. (Students are advised to consult the School before registering.) (*Prerequisite:* 415; or permission of the Director or designate) FS(0-5-1)

NURS 482 (1½) ADVANCED NURSING: ADMINISTRATION OF NURSING PRACTICE
This course involves application of management theory through a practicum in a service agency. Students will be placed with a field guide selected on the basis of the student's interest and background. Students work individually or in groups and will meet weekly in a scheduled seminar to discuss administrative issues of mutual concern. Students are advised to consult the School before registering. Offered as resources permit. (*Prerequisite:* 415 and 450; or permission of the Director or designate) FS(0-5-1)

NURS 483 (1½) ADVANCED NURSING: TEACHING AND LEARNING
This course provides students with opportunities to experience a variety of teaching-learning situations with patients, staff, peers or others and examine that experience using reflective analysis, discussion and the literature. Students will engage in an individually contracted practicum as part of the course. The course is presented within a humanistic philosophical framework which guides its process and teaching-learning strategies. (*Prerequisite:* 310/402, 307 or permission of the Director or designate) S(3-0)

NURS 485 (HINF 385) (1½) COMPUTER APPLICATIONS IN NURSING
This interdisciplinary course for Nursing and Health Information Science students is designed to facilitate the exploration of the impact of information technology in relation to the nursing profession. Course content focuses on computer applications and related issues in nursing practice, nursing administration, nursing education, and nursing research. F(3-0)

NURS 490 (1½ or 3) DIRECTED STUDIES
Directed readings, research projects or special studies in a specified area of interest. A proposal is developed in consultation with a faculty member and includes a plan for the evaluation of the student's work. The proposal must receive the approval of the Director before students are permitted to register. (Offered as resources permit)

SCHOOL OF PUBLIC ADMINISTRATION

John Langford, B.A. (Car.), M.A. (Oxon.), Ph.D. (McG.), Professor and Director of the School
Robert L. Bish, A.B. (S. Calif.), A.M., Ph.D. (Indiana), Professor
The Honourable Ronald I. Cheffins, Q.C., B.A., LL.B. (Brit. Col.), LL.M. (Yale), of the Bar of British Columbia, Professor
James Cutt, M.A. (Edin.), M.A., Ph.D. (Tor.), Professor
Ralph W. Huenemann, B.A. (Oberlin), M.A., Ph.D. (Harv.), Professor of Economic Relations with China
James C. McDavid, B.A., M.A. (Alta.), M.A., Ph.D. (Indiana), Professor
James J. McRae, B.A. (U. of Vic.), M.A., Ph.D. (W. Ont.), Professor
Hartmut J. Will, Dipl.-Kfm (F.U., Berlin), Ph.D. (Ill.), Professor
Frank Cassidy, B.B.A. (C.C.N.Y.), M.A., Ph.D. (Stan.), Associate Professor and Faculty Coordinator, Aboriginal Program
J. Barton Cunningham, B.A. (Brigham Young), M.P.A., Ph.D. (S. Calif.), Associate Professor
Thomas A. Lambe, B.A.Sc. (Brit. Col.) M.S., Ph.D. (Stan.), Associate Professor
James N. MacGregor, M.A. (Glas.), M.Sc., Ph.D. (U. of Vic.), Associate Professor
Genevieve Eden, B.A., M.I.R., Ph.D. (Tor.), Assistant Professor
Lorne M.J. Borody, B.A. (Winn.), Administrative Officer
Heather A. Kucheran, B.A.Sc. (Leth.), University Extension Program Coordinator
Mark K. Loken, B.A. (Conc. Coll.), M.A. (Calg.), Ph.D. (Duke), Cooperative Education Coordinator
Rhordon Wikkramatileke, B.A., M.P.A. (U. of Vic.), University Extension Program Coordinator

Visiting and Adjunct Appointments:

A.R. Dobell, B.A., M.A. (Brit. Col.), Ph.D. (M.I.T), Adjunct Professor (1990-92)
John L. Fryer, B.Sc. (Lond.), M.A. (Pitt.), Visiting Professor (1991-94)
Edward John, B.A. (U. of Vic.), LL.B. (Brit. Col.), Adjunct Professor (1990-92)
D. Brian Marson, B.A., M.A. (Brit. Col.), M.P.A. (Harv.), Adjunct Professor (1990-92)
Thomas K. Shoyama, B.A., B.Com. (Brit. Col.), Visiting Professor (1990-92)
Peter J. Adams, B.Sc., M.Sc. (Lond.), Adjunct Associate Professor (1990-92)
Doreen Mullins, Visiting Associate Professor (1990-92)

GRADUATE PROGRAMS

For information on studies leading to the M.P.A. Degree, see page 285.

UNDERGRADUATE PROGRAM

DIPLOMA PROGRAM IN PUBLIC SECTOR MANAGEMENT

The School of Public Administration offers a part time off campus program of studies leading to the Diploma in Public Sector Management which is available at a number of regional centres in the province. The diploma will be awarded upon successful completion of 18 units of course work with an overall grade point average of at least 2.00. The program is intended for practising or prospective managers in the public sector who wish to acquire the skills and background necessary for effective and responsible management, and who are interested in broadening their understanding of the administrative process.

Admission:

Courses will be taught at a level which is consistent with other third and fourth year undergraduate courses offered at the University of Victoria, and applicants will be required to demonstrate that they possess the academic proficiency necessary to benefit fully from the program. Students without a bachelor's degree will normally be expected to have the equivalent of at least the first two years of university obtained from institutions such as BCIT, the Community Colleges, or other recognized professional associations. Candidates without formal post-secondary qualifications but with demonstrable experience at senior levels of responsibility may be admitted as conditional students, with continu-

ation in the program subject to performance in the first two to three courses with a grade of C+ or better. In addition to academic background, all applicants should have had a minimum of three years experience in dealing with issues characteristic of the public sector. A limited number of students not formally admitted to the program may register for individual courses, with the permission of the Director of the School of Public Administration. Students should check which courses are being offered at the regional centre nearest them. Inquiries about the program should be forwarded to: The Director, School of Public Administration, University of Victoria, Box 1700, Victoria, B.C. V8W 2Y2.

Program of Studies:

The Diploma Program in Public Sector Management will be available on a decentralized part time study basis. Students will, therefore, be limited in their choice of courses to what is being offered in the centre nearest them. Completion of the 18 units will normally take three to four years, although some courses will be run as intensive summer institutes in residence at the University of Victoria, which will accelerate progress towards the diploma.

Students may be permitted to complete up to 4½ units of credit towards the Diploma in Public Sector Management by taking appropriate courses offered through other departments of the University of Victoria or at other universities. Prior approval must be obtained from the Director of the School of Public Administration.

Students may be granted approval to exceed 4½ units of transfer credit in cases where the credit has been (or will be) obtained for graduate level courses taught through the School of Public Administration at the University.

A typical program of studies would include:

4½ units: Core courses (310, 311, 312)
3 units: Social/Applied sciences (313, 406)
7½ units: Managerial theory (420, 421, 422, 424, 425, 431, 437, 451)
3 units: Policy areas (410, 415, 423, 445, 452, 465, 466, 470, 490, other courses to be developed in the future dealing with health administration, human services administration, environment, transportation, etc.)

The program includes a Local Government Option. Completion of four courses (ADMN 312, 445, 452, and 465) has been identified by the Provincial Board of Examiners, in consultation with the Municipal Officers' Association of B.C., as a mandatory educational requirement for the following certificates:

— Senior Certificate in Municipal Administration
— General Certificate in Municipal Management
— Advanced Certificate in Municipal Management

With these courses, in combination with other educational qualifications and relevant work experience in local government in British Columbia at a senior administative level, local government employees may apply to the Board of Examiners for certification.

For further certification information contact: Secretary, Board of Examiners, Min. of Municipal Affairs, Recreation & Culture, Parliament Buildings, Victoria, B.C. V8V 1X4, telephone (604) 387-4053. For further MOA Education Program information contact: Executive Director, Municipal Officers' Association of B.C., Suite 200, 880 Douglas Street, Victoria, B.C. V8W 2B7, telephone (604) 383-7032.

CERTIFICATE PROGRAM IN THE ADMINISTRATION OF ABORIGINAL GOVERNMENTS

The School of Public Administration offers a unique part time university credit program of studies leading to a Certificate in the Administration of Aboriginal Governments. The program consists of eight courses, seven of which are required. The courses focus on critical topics such as communicating, organizing and managing in aboriginal governments as well as the legal, political, economic and public policy dimensions of these governments.

This university credit program is designed for people who want to learn more about aboriginal governments. It should be of special interest to people who work in or dierct aboriginal governments and organizations. Individuals may take particular courses, although enrolment by students who are not formally admitted to the program will be limited. For those students who also are granted admission to the School's Diploma in Public Sector Management (DPSM) program, all courses are also eligible for credit towards the Diploma.

ADMISSION:

Successful applicants will be expected to meet the University English requirements and have completed Grade 12. Mature applicants will be considered, as detailed in University policy. Courses will be taught at a level which is consistent with other third and fourth year undergraduate courses offered at the University of Victoria, and applicants will be required to demonstrate that they possess the academic proficiency necessary to benefit fully from the program. Candidates without formal post-secondary qualifications but with demonstratable experience may be admitted, with continuation in the program subject to performance in the first two to three courses with a grade of C+ or better. A limited number of students not formally admitted to the program may register for individual courses, with the permission of the Director of the Program.

Inquiries about the program should be forwarded to: The Director, Administration of Aboriginal Governments Program, School of Public Administration, University of Victoria, Box 1700, Victoria, B.C. V8V 2Y2.

APPLICATION TO THE PROGRAM:

The application deadline is May 1. Classes start in September and there are no new admissions after that until those that are granted for the next September term. All applicants are notified about the status of their application by July 1.

Applicants are required to submit:

- completed application forms;
- two official transcripts of any previous university and college work;
- a resume outlining work experience;
- a typed letter of one to three pages in length indicating relevant personal background and reasons for enroling the program;
- a letter from the employer, if there is one, indicating the employer's support for the student's participation in the program and the understanding of the obligations involved, with particular reference to the time required;
- and, two references on forms supplied by the University, from employers or persons who know the applicant well. References from relatives are not acceptable.

An interview after all documentation has been received may be required, although the applicant's geographic distance from the campus will be taken into consideration.

The School of Public Administration works actively with students to help secure necessary financial assistance. Students and employers are advised to consult with the School regarding scholarships and funding from the federal and provincial governments.

PROGRAM OF STUDIES:

All courses in the program are offered on the University's campus. To accommodate students coming from out of the Victoria area, courses are designed so that students may come to Victoria for a series of one or more concentrated, multiple-day seminars. There are also reading and assignments between classes.

Students need seven required courses and one elective in order to obtain a certificate.

The elective may be chosen from:

- Approved university transfer courses or University of Victoria courses in English, the social sciences, business administration or a related field.
- Approved credit courses in the School's Diploma in Public Sector Management program.
- ADMIN 384 (Emerging Policy Issues in Aboriginal Governments) and/or ADMIN 385 (Economy, Society and Aboriginal Governance).

All students are required to take ADMIN 380 and ADMIN 381 to begin their program. Students may write a challenge examination for Admin 380 and if they pass, they can be excused from this requirement. An approved elective will required in such instances. The only courses that have prerequisites are ADMIN 380 and 381. Completion of the 12 units can take from 16 to 24 months.

As they work their way through the program, students are provided with a comprehensive range of support services, including:

Personal, academic and career counselling

- Tutoring
- Teleconferencing between classes
- Student support networks

Throughout the program considerable attention is paid to further developing student's written and oral communication skills. Liaison is maintained with students' employers, when required.

DESCRIPTION OF COURSES:

Each course features carefully developed materials especially designed for it. In most cases, teleconferencing is also used to facilitate home study between seminars. The required credit courses are:

ADMN 380 (1½) — WRITTEN COMMUNICATIONS IN ABORIGINAL ORGANIZATIONS
This course will focus on the development of the written communications skills that contribute to effective performance in aboriginal organizations. Written assignments will be designed to improve the student's ability to communicate clearly, organize material and present arguments. A focus will be placed on the developments of good grammar and prose style, with a concentration on the preparation of briefs, the drafting of resolutions, reports, discussion papers, business letters, memoranda, workshop presentations, and press releases. The unique challenges of working in aboriginal organizations and communities will inform the effort throughout. (No prerequisite)

ADMN 381 (1½) — ORGANIZING AND ABORIGINAL ORGANIZATIONS
This course will consider the dynamics of organizing as an activity in and with aboriginal organizations. An emphasis will be placed on organizing processes, goals, structures, culture, power, leadership, strategic decision-making, effectiveness, and change as well as the organizing skills and values that need to be developed for aboriginal organizations, goverments and communities to achieve fuller self-determination. The role of aboriginal culture and traditions will be explored throughout as will the contemporary development of the organizations of aboriginal peoples in Canada. (No prerequisite)

ADMN 382 (1½) — LAW AND ABORGINAL GOVERNMENTS IN CANADA
This course will examine laws relevant to Aboriginal governments in Canada. It will examine the authorities of and legal relationships between Aboriginal, Band, federal and provincial governments. It will include an examination of aboriginal (customary) laws, international, constitutional, statutory and common law pertinent to aboriginal governments. Special attention will be given to emerging concepts in the development of law on aboriginal title, aboriginal rights, treaty rights, treaty and land claims negotiations. As well the course will focus on laws relevant to the day to day operations of aboriginal and/or Band governments. (*Prerequisites:* ADMN 380 and 381)

ADMN 383 (1½) — ABORIGINAL GOVERNMENTS AND CANADIAN GOVERNMENT
This course wil consider the traditional nature and contemporary evolution of aboriginal governments, with special emphasis on British Columbia and the dynamics of the Canadian federal system. Topics to be covered will include the movement for self-government, the constitutional process, citizenship, the jurisdiction and financing of aboriginal governments, the Indian Act, service provision by these governments and the Canadian political process, as it relates to and is affected by aboriginal governments. (*Prerequisites:* ADMN 380 and 381)

ADMN 480 (1½) — MANAGING WITH PEOPLE IN ABORIGINAL ORGANIZATIONS
This course will focus on the skills and understanding that managers in aboriginal organizations need to work with people to attain effective performance. Topics will include the basic principles of human resource management, labour relations, motivation, job design, performance appraisal, group dynamics, negotiating, time management, conflict management and managerial training and development. Special emphasis will be placed upon the relevance of the cultural traditions and values of aboriginal peoples. (*Prerequisites:* ADMN 380 and 381)

ADMN 481 (1½) — MANAGING SYSTEMS IN ABORIGINAL ORGANIZATIONS
This course will provide the student with an opportunity to further enhance the skills and understandings necessary to develop and operate various systems and programs in aboriginal organizations effectively. Topics will include the basic principles of planning, finanical management, accounting, budgeting, information systems, evaluation, project and program development. Special emphasis will be placed upon the relevance of the cultural traditions and values of aboriginal peoples. (*Prerequisites:* ADMN 380 and 381)

ADMN 482 (1½) — STRATEGIC COMMUNICATIONS IN ABORIGINAL GOVERNMENTS
This course will provide students with the understanding and skills necessary for effectively managing organizational communications. A focus will be placed on the development of oral and written communications skills in relation to the media, strategies for organizational communications and promotion, the evaluation of communication efforts and the practical implications of good communications practices for administrators. The unique challenges and roles of strategic communications in aboriginal organizations will inform course content throughout. (*Prerequisites:* ADMN 380 and 381)

Two program electives are offered in alternating years:

ADMN 384 (1½) — EMERGING POLICY ISSUES IN ABORIGINAL GOVERNMENTS
This course will provide students with an opportunity to explore a selection of the more critical policy issues which characterize and affect aboriginal governments. Special attention will be paid to policy analysis skills, the public policy development process and the international experiences of aboriginal peoples and their governments. (*Prerequisites:* ADMN 380 and 381 or permission of Program Director)

ADMN 385 (1½) — ECONOMY, SOCIETY AND ABORIGINAL GOVERNANCE
This course will focus on the economic and social contexts of aboriginal governments in Canada. Matters covered may include the role and importance of land in aboriginal society, resource management, the contemporary socio-economic conditions of aboriginal peoples and their communities, the particular challenges aboriginal peoples encounter in urban settings and the dynamics of economic development. Particular attention will be paid to the historical and cultural dimensions of the subject. (*Prerequisites:* ADMN 380 and 381 or permission of Program Director)

More detailed information and the relevant forms may be obtained by contacting the Director, Administration of Aboriginal Governments Program, at the School of Public Administration.

UNDERGRADUATE COURSES

ADMN 310 (formerly 403) (1½) PUBLIC SECTOR APPLICATIONS OF MICROECONOMIC ANALYSIS
A review of the principles of microeconomics as they apply to public sector management and decision making. The topics covered include: theories of demand, production and cost, the firm, income distribution, and welfare economics; the application of microeconomics to selected social issues such as pollution of the environment, education, health and welfare, agriculture, transportation and taxation. (Not open for credit to students who have taken or are taking ECON 300, 302 or 304A)

ADMN 311 (formerly 404) (1½) POLITICAL ANALYSIS: CANADIAN GOVERNMENT AND POLITICS
An investigation of the political and institutional framework within which Canadian public administrators operate. Topics to be examined include the Constitution, federalism, Canadian political culture, the party and electoral systems, pressure groups, the legislature, cabinet government, line departments and agencies, and administrative responsibility. (Credit will not be given for both 311 and 504)

ADMIN 312 (1½) PRINCIPLES OF ADMINSTRATION: CONCEPTS AND PROCESS
An investigation of the process of administration, the sequence and cycle of events that are integral to this process. In particular, the key processes of planning, organizing, implementing and evaluating will be examined.

ADMN 313 (formerly 400) (1½) QUANTITATIVE ANALYSIS
The course will focus on the applications and limitations of mathematical modelling techniques to the analysis of policy problems in the public sector. Tools used in resource optimization, cost benefit analysis, financial management and statistical analysis will be presented and explained.

ADMN 406 (1½) ORGANIZATIONAL ANALYSIS
An introduction to theories of individual and group behaviour in the context of complex social systems. Topics will include: the history of organization and management theory; concepts of socialization, leadership, communication, conflict, decision making, and motivation.

ADMN 410 (1½) (formerly 300) THE IMPACT OF GOVERNMENT
An introduction to the costs, benefits, and rationale behind the growth of government involvement in society. Topics will include: government intervention in the allocation of resources, stabilization policies, the impact of government on the capital markets, the 'make or buy' dilemma in government procurement; government regulatory activity, the means for determining public choice, and the social effects of welfare and environment policy.

ADMN 415 (formerly 302) (1½) ISSUES IN PUBLIC ADMINISTRATION
An analysis of the background and substance of current dilemmas and controversies concerning the role and practice of government administration. Topics will include: modes of public sector organization, and the formal structure of government administration at the municipal, provincial and federal levels.

ADMN 420 (1½) THE PUBLIC POLICY PROCESS
An introduction to the policy process as it is analysed in modern theoretical literature, and as it may be examined through case studies from Canadian and non-Canadian contexts. Topics will include: policy formulation, the structural aspects of policy execution, and the human dimension of implementation and coordination.

ADMN 421 (1½) BUDGETING AND MANAGEMENT SYSTEMS
The focus of this course will be on the use of budgeting systems in the planning and control function of management. Topics will include phases of the financial management cycle, including forecasting and needs analysis; budgeting, internal control, evaluation, and audit. Institutional structures and operating procedures which govern the allocation and expenditure of government funds will also be examined.

ADMN 422 (1½) THE RESPONSIBLE PUBLIC SERVANT
Is it acceptable for a public servant to blow the whistle? Should a public servant be able to moonlight? Should public servants feel obligated to restrict their political rights? To what levels of risk should public servants expose members of the public? This course provides a practical examination of the arguments that are made on both — or many — sides of these and other difficult value questions currently confronting public servants and considers institutional means and techniques which can be used to strengthen and encourage responsible public service. (Credit will not be given for both 422 and 519)

ADMN 423 (1½) LOCAL GOVERNMENT
Analysis of the legislative framework, organization, operation and finance of local government in British Columbia. (Credit will not be given for both 423 and 545.)

ADMN 424 (1½) MANAGEMENT INFORMATION SYSTEMS
A review of data and information processing concepts and procedures, with consideration of the costs and benefits of different information systems which can be developed to meet the informational needs of public sector managers for functions such as planning, budgeting, control and evaluation. (Credit will not be given for both 424 and 524).

ADMN 425 (1½) LABOUR RELATIONS IN THE PUBLIC SECTOR
An examination of the development and functioning of collective bargaining in the provincial public service. Special attention will be given to the legislation regulating bargaining, the institutions that do the bargaining, determination of bargaining units, exclusions, bargainable issues, content of collective agreements, arbitration, and dispute resolution. (Credit will not be given for both 425 and 525)

ADMN 431 (1½) PERSONNEL MANAGEMENT IN THE PUBLIC SECTOR
The course will examine various aspects of the personnel function within government, and will compare current theory and practice in such areas as: manpower planning, recruitment, and selection; performance evaluation, compensation, benefits, and promotion; career planning, and staff development; labour relations, discipline, and control structures. Considerable emphasis will be placed on the detailed analysis of the relevant legislation. (Credit will not be given for 431 and 531.)

ADMN 437 (1½) PUBLIC SECTOR PROGRAM EVALUATION
An introduction to the organizational, methodological and conceptual issues that are involved in understanding how programs are evaluated. The course will focus on developing a practical understanding of the range of program evaluations conducted in the public sector. Attention is paid to effectiveness evaluation techniques as well as benefit cost applications to evaluations. (Credit will not be given for both 437 and 537.)

ADMN 445 (1½) URBAN AND REGIONAL ECONOMICS
Analysis of economic forces which influence spatial patterns and the relationship between spatial patterns, public services, land use planning and land use control processes. (Prerequisites: 310 or equivalent, or ECON 201)

ADMN 451 (1½) ADMINISTRATIVE LAW
An introduction to the principles of administrative law, paying particular attention to the relationship between the administrator and the public. Issues such as the requirement of fairness and natural justice in decisions affecting the public, appeals from administrative decisions, public participation in the decision making process, and political accountability and control of boards and independent agencies will be discussed. (Credit will not be given for both 451 and 551.)

ADMN 452 (1½) LOCAL GOVERNMENT LAW
Analysis of legislation, regulations and court decisions within which local governments in B.C. function. The presentation is designed to make nonlawyers familiar with local government law and legal processes as they apply to local government activities. (*Prerequisite:* 451 or equivalent)

ADMN 465 (1½) LOCAL GOVERNMENT POLICY
An integrated analysis of selected local government problems drawing on urban and regional economics, local government law and the understanding of local government structure and operations. Topics selected for examination will vary. (*Prerequisites:* 423 or equivalent, 445, 452)

ADMN 466 (1½) PROVINCIAL GOVERNMENT POLICY AND ADMINISTRATION
An examination of the legislative structure, cabinet committees, ministries, central agencies, and Crown corporations of the B.C. Government. Attention will be focused on the major government programs, and the administrative processes underlying the formation of public policy as well as the management systems employed in the implementation and evaluation of government programs.

ADMN 470 (1½-3) CONTEMPORARY TOPICS IN ADMINISTRATION
A study of selected topics drawn from the current literature and practices in Public Administration or related fields. Students may be permitted to enroll in ADMN 470 more than once for credit, provided the course content is different from that previously taken.

ADMN 490 (1½) DIRECTED STUDIES
Directed reading and/or a research project under the supervision of a Faculty Member. (Open to students only with the permission of the Director)

SCHOOL OF SOCIAL WORK

Andrew Armitage, B.Sc. (Lond.), B.A. (Cantab.), M.S.W. (Brit. Col.), Associate Professor and Director of the School
Andrew Farquharson, B.A. (Bishop's), M.S.W. (McG.), M.Ed., Ed.D. (Tor.), Professor
Brian Wharf, B.A., B.S.W., M.S.W. (Brit. Col.), Ph.D. (Brandeis), Professor
Marilyn J. Callahan, B.A., B.S.W., M.S.W. (Brit. Col.), Associate Professor
John Cossom, B.A. (W. Ont.), B.S.W., M.S.W. (Tor.), Associate Professor
Marjorie D. Martin, B.A., B.S.W., M.S.W. (Brit. Col.), Assistant Professor
Elizabeth D. Pittaway, B.S.W. (W. Ont.), M.S.W., D.S.W. (W. Laur.), Assistant Professor
David T. Turner, LL.B. (Sheff.), Dip.S.W. and Admin. (Oxon.), Assistant Professor
Barbara Whittington, B.A., M.S.W. (Brit. Col.), Assistant Professor
Dora Leigh Bjornson, Program Assistant — Extension Program
Walene Whitaker, B.A., M.S.W. (Brit. Col.) Practica/Admissions Coordinator

Visiting and Adjunct Appointments:

Ronald R. Pollard, Visiting Professor, B.A., B.S.W., M.S.W. (Brit. Col.), Visiting Professor (1990-91)
Leslie Brown, B.S.W. (Regina), M.P.A. (U. of Vic.), Visiting Assistant Professor (1990-91)
Barbara M. Herringer, B.A. (Alta.), B.S.W., M.S.W. (Brit. Col.), Visiting Assistant Professor (1990-91)
Audrey Sampson, Adjunct Assistant Professor (1991-92)
Frances Tausig, B.A., M.Sc. (McM.), M.S.W. (Tor.), Visiting Lecturer (1990-91)

BACHELOR OF SOCIAL WORK PROGRAMS

The School of Social Work offers a program of studies leading to the degree of Bachelor of Social Work (B.S.W.). This program is fully accredited by the Canadian Association of Schools of Social Work.

The purpose of the B.S.W. program is to prepare students for the general practice of social work, particularly in rural, northern and Native communities. This requires that graduates be skilled in working with individuals, families and small groups to resolve personal, familial and community issues. Graduates are also expected to work cooperatively with other professionals and community residents to develop self-help systems and improve social conditions. Graduates are employed in a wide range of government and voluntary organizations such as family and children's services, hospitals, women's services, corrections and Native social services.

The B.S.W. program is delivered in several ways. Students may complete their studies through full time, regular winter sessions, part time winter and summer sessions and through distance education. The intent of the distance education approach, delivered in cooperation with the Division of University Extension in nonmetropolitan regions of the province, is to assist practicing social workers to obtain a B.S.W. degree while continuing with employment. The School is working with First Nations in B.C. to strengthen its program for Native social workers, both on and off campus.

Students admitted to the School can move between distance and campus study providing that resources permit. The exception is that on campus students cannot normally change to the distance format for practica courses.

ADMISSION REQUIREMENTS

Admission to this program requires completion of the first two years (30 units) of an undergraduate program at the University of Victoria with an overall average of at least second class (a grade point average of 3.50) or better, or the equivalent at another university or a community college. This will normally include 3 units of English.

The precise number admitted will depend on the resources available to the School and the number of qualified applicants. Preference will be given to students who have gained experience in the social services field on a paid or volunteer basis and who have demonstrated interest in social work practice in rural areas. Selection of the group admitted to the School will be made on the basis of grades, a personal written submission and an interview.

Students should be aware that two practica are required in order to complete the course of study for a B.S.W. Practica agencies may request a criminal record check as part of their screening process. Students may be required to complete their practica in an agency requiring a criminal record check.

On campus applicants are advised that a block field work placement in a rural area is required for all students. Normally not more than ten placements may be arranged in Greater Victoria each year. A student wishing to be considered for one of these placements should indicate this at the time of admission.

Students who have completed a human services training program at a college may be eligible to receive discretionary credit from the School. This is normally 6 units for each year of the program.

Students admitted to the School with a baccalaureate degree in a human service profession which includes a practicum component may be granted credit in up to 6 units at the discretion of the Director of the School and the Dean of the Faculty.

Up to a total of 140 students can be admitted to the Distance Education B.S.W. program. However, a minimum of two years human service work experience is also required for admission to this program in addition to the minimum of two years (30 units) of university credit.

All students are required to complete Social Work 200A and 200B or their equivalents as prerequisites for admission.

Students transferring from other postsecondary institutions must submit an application for admission to the University to the Director of Admission Services by February 28.

Returning students who are in or who have already completed second year at the University of Victoria must make an application for entry into the B.S.W. program to Records Services by February 28.

PROGRAM REQUIREMENTS

1. Candidates for the B.S.W. degree must comply with the minimum degree requirements for a Bachelor's degree outlined on page 18 of this Calendar. Particular attention is drawn to the English requirement for undergraduates as set forth on page 13 of the Calendar.
2. Students admitted to the B.S.W. program with a baccalaureate degree will be granted exemption from the requirement of 3 units of electives in the third and fourth years.
3. Completion of the B.S.W. degree requires 60 units of study as outlined below.
4. Students in the School of Social Work must maintain a sessional grade point average of 3.50 in both third and fourth years, otherwise they may be required to withdraw from the School.
5. Students are referred to page 294 of the Calendar for regulations concerning practica. The School requires that students adhere to the BCASW Code of Ethics.

First and Second Year:

Social Work 200A and 200B are required for entry into the B.S.W. program and are normally taken in second year. 200A and 200B are open to any student who has completed first year satisfactorily but carry credit in the Faculty of Arts and Science only as a free elective (see page 37 of the Calendar: Other Courses Outside the Faculty of Arts and Science).

Students meeting all requirements for admission except 200A and 200B can apply for conditional acceptance and enroll in 200A and 200B in Summer Studies.

A 1½ unit introductory statistics course is a prerequisite to 401, a required fourth year course. Students are strongly advised to take this statistics course prior to admission, although it may also be selected as an elective in third year. STAT 250, SOCI 371, PSYC 300A or ECON 240 are possible courses.

Students are required to complete either a 1½ unit course in lifespan development, or to take SOCW 355 after admission to the school.

Other courses or their equivalents which are recommended to students considering admission to the school are:

ANTH 100A, 100B, 200A, 200B

BIOC 201
BIOL 101
CYC 200A, 200B (carry credit in the Faculty of Arts and Science only as free electives)
C SC 100
ECON 100, 201, 202
ENGL 115, 116, 121, 122, 225
GEOG 101A/B, 102, 205A/B
HIST 105, 130, 234
PHIL 100, 201, 203, 211, 222A/B, 232, 233, 269
POLI 100, 202, 220, 230, 250
PSYC 100, 240, 250
SOCI 100, 103, 202, 203
WS 200A/B

(Second year students wishing to take upper level courses should consult with the appropriate department and the courses listed under Third and Fourth Year.)

Third and Fourth Year:

In the third year students will take 303, 304, 350A, 352, and 3 units of electives chosen in consultation with the Director (unless special permission is received from the Director to omit a course or courses from this group). 355 is required if a 1½ unit course in lifespan development has not been completed prior to admission. Total units: 15.

In the fourth year students will take 401, 402, 403, and 455 and one of 452 or 477 and one of 450 or FHSD 400, and 1½ units of electives chosen in consultation with the Director (unless special permission is received from the Director to omit a course or courses from this group). Total units: 15

Total units for Third Year and Fourth Year: 30.

Appropriate third and fourth year electives include any of the above first and second year courses and the following third and fourth year courses:

ADM 311, 466
ANTH 322, 335, 336, 339A/B, 406, 418, 419
CYC 301
ECON 301, 315, 321, 410A/B
ED-B 320, 436, ED-D 414
ENGL 400, 402, 403
ES (Environ. Studies) 300A/B
FHSD 400, 401
GEOG 330, 347A, 443
HIST 344, 346A/B, 348, 349, 354B, 355, 359, 464
PHIL 302, 328, 330, 331, 333
POLI 350, 351, 352, 360, 361, 404, 450, 465, 470
PSYC 300A, 331, 333A/B
SOC W 350B, 355, 390, 450, 452, 454, 460, 476, 477, 490
SOCI: all third and fourth year courses are recommended

Total Units for the program: 60.

Through the B.C. Government ACCESS program B.S.W. courses are also offered on a collaborative basis through designated community colleges. The designated colleges are Malaspina College (Nanaimo), Cariboo College (Kamloops), and Okanagan College (Kelowna). Both Cariboo College and Okanagan College are working towards offering a full program of B.S.W. degree studies, while Malaspina College offers some B.S.W. degree courses.

Students wishing to register for a B.S.W. program at Cariboo or Okanagan Colleges should contact the College. Malaspina students wishing to complete a B.S.W. degree should apply to the University of Victoria School of Social Work. (Note: Special rules apply to College transfer courses. University of Victoria B.S.W. students interested in taking College courses as part of their program should contact the School of Social Work.)

COURSES

Third and fourth year courses except 304 and 402 may be taken by students outside the School with the permission of the Director. 303, 350, 351, 352, 401, and 452 may be of particular interest to students in Child Care, Nursing, Law, Education, and Public Administration. Students in other faculties wishing to take these courses should consult the appropriate advising service.

(Course offering codes: Y = Sept.-Apr., F = Sept.-Dec., S = Jan.-Apr., K = May-Aug., NO = Not offered, this session)

SOC W 200A (1½) AN INTRODUCTION TO SOCIAL WORK PRACTICE
An introduction to the general practice of social work with particular emphasis on practice in rural communities and with emphasis in interdisciplinary approaches and the roles of consumer and self help groups in the helping process. This course reviews the knowledge bases and skills of social work practice, and assists students to evaluate their interests and capacities for entering the profession of social work. FS(3-0)

SOC W 200B (1½) AN INTRODUCTION TO SOCIAL WELFARE IN CANADA
An introduction to and analysis of major social policies and programs in Canada. Emphasis will be given to policies in income security, corrections, health, family and children, and housing and will include an examination of the role of the social worker in formulating policy. FS(3-0)

SOC W 303 (3) SOCIAL WORK PRACTICE AND PLANNED CHANGE
The objective of this course is to introduce students to the generic approach to social work practice by using major concepts and theories concerned with the planning of change. Y(1½-0-1½)

SOC W 304 (4½, formerly 6) SOCIAL WORK FIELD PRACTICE
In the third year field placement, students are assigned a wide range of responsibilities at the individual, group and community level. Precise objectives will be established on a contract basis between students, faculty and the agency. (*Pre- or corequisites:* 303 and 352) Y(2 days per week)

SOC W 350A (formerly half of 350) (CYC 350A) (1½) LAW AND SOCIAL SERVICES
The objective is to provide Social Work and Child and Youth Care students with an understanding of laws and processes that impact on their professional practice, accountability and ethics. For example these include law concerning child welfare, young offenders, income assistance and families. (*Prerequisite:* Third year standing or instructor's permission only)

SOC W 350B (formerly half of 350) (1½) LEGAL SKILLS FOR SOCIAL WORKERS
The objective is to develop basic competency in court skills (report writing, court presentation, evidence giving), advocacy skills (individual and group, political lobbying, advocating before tribunals, etc.), and conflict resolution skills (negotiation, mediation, arbitration, etc.), for Social Work students. (Open to third and fourth year F.H.S.D. students with instructor's permission) (Enrolment may be limited) (*Prerequisite:* 350A or CYC 350A)

SOC W 352 (3) INTERPERSONAL COMMUNICATION
This course has a number of interrelated objectives; to introduce students to the literature on interpersonal communication; to afford an opportunity for a critical review of various approaches to interpersonal helping; to assist students in developing a personal commitment to, and philosophy of, the art of interpersonal helping; and to involve students in simulated practice experiences. Y(1-0-2)

SOC W 355 (formerly half of 351) (1½) HUMAN DEVELOPMENT
The objectives of this course are to: (1) introduce students to concepts and models of how human behaviour is acquired, maintained and modified, and (2) develop an understanding of normal human development as a knowledge base for practice with individuals, families and groups in a rural context. S(3-0)

SOC W 390 (1½ or 3) DIRECTED STUDIES
Students must consult with the Director prior to registration. The intent is to allow students the opportunity to concentrate in a particular field of social welfare such as corrections, gerontology or mental health.

SOC W 401 (1½) THE RESEARCH PRACTITIONER IN THE HUMAN SERVICES
The objectives of this course are that the students will be able to: define

research practitioner; understand the different ways of gaining knowledge; understand the use of descriptive, associative and inferential statistics in data analysis; apply research and evaluation studies. (This course is normally taken as part of the fourth year social work.) (Available to other students with permission of the instructor.) (*Prerequisite:* A 1½ unit introductory statistics course, such as STAT 250, or SOCI 371) F(3-0)

SOC W 402 (6) SOCIAL WORK FIELD PRACTICE
The intent of this course is to refine intervention skills at the individual, family, group and community level. Precise objectives will be established on a contract basis between students, faculty and the agency. Entry into this course will be restricted to fourth year students in the School of Social Work. (*Prerequisite:* 304; *corequisite:* 403, except for students in the decentralized program) (Grading: COM, N or F)

SOC W 403 (1½) GENERALIST SOCIAL WORK PRACTICE
This course has the objectives of (a) strengthening the students' understanding of generalist social work practice and problem solving approaches, (b) heightening the students' ability to recognize and grapple with ethical dilemmas, and (c) providing students with an opportunity to think critically about their own conceptual and philosophical or orientation to social work practice. (This course is only offered in distance education format.) (*Pre- or corequisite:* SOC W 402 or instructor permission) S(3-0)

SOC W 450 (1½) UNDERSTANDING HUMAN SERVICE ORGANIZATIONS
The objective of this course is to provide students with an understanding of the components and dynamics of human service organizations so that they may practise more effectively within these organizations and participate in their development and change. (This course will normally be restricted to students in the fourth year of social work and to students with at least fourth year standing in other professional programs with the permission of the instructor.) (Students may take NURS 450 instead of this course, with the permission of the nursing instructor.) F(3-0)

SOC W 452 (1½, formerly 3) EDUCATIONAL STRATEGIES IN SOCIAL WORK: CONTENT AND PROCESS
This course focuses on the use of adult education as a strategy for individual and social change. The course uses the medium of student presented workshops, to achieve its objective of developing skills and knowledge for planning and delivery of educational programs. (May be taken once only for credit) (Entry into this course is normally restricted to fourth year students in the School of Social Work and to students with at least fourth year standing in other professional programs with the permission of the Director of the School of Social Work.) (3-0)

SOC W 454 (1½) HUMAN SERVICES AND NATIVE PEOPLE
The course will critically examine a variety of intervention strategies and their appropriateness for working with native Indian people. The strategies will include counselling on an individual, family and group basis, self help groups and community development. (Offered as resources permit) S(3-0)

SOC W 455 (formerly half of 351) (1½) THE RURAL COMMUNITY
The objectives of this course are to: (1) analyze rural community structures and problems, (2) understand the delivery of human services in rural communities, and (3) review approaches to community work practice. F(3-0)

SOC W 460 (1½) SPECIAL TOPICS IN SOCIAL WORK AND SOCIAL WELFARE
This is a variable content course that will deal with special issues in social welfare and approaches to social work practice. Restricted to students in the third or fourth year of study. May be taken more than once for credit to a maximum of three units. (Offered as resources permit) FS(3-0)

SOC W 476 (1½) FAMILY AND CHILD WELFARE POLICY
This course provides a critical examination of family and child welfare policy and practice issues. (Restricted to third and fourth year students) (*Prerequisite:* 200B or permission of the instructor)

SOC W 477 (1½) FAMILY PRACTICE
The primary objective of this course is to introduce students to interdisciplinary theoretical perspectives and practice approaches that are relevant for working with the contemporary family in all its forms. A family systems framework and a feminist perspective will provide the theoretical base from which students will begin to develop their own family practice skills through use of video, class exercises and lab experiences. This course is open to both third and fourth year FHSD students, and students from other faculties with instructor permission. (Credit will not be permitted for 477 and 485/486) (3-0)

SOC W 490 (1½ or 3) DIRECTED STUDIES
Students must consult with the Director prior to registration. The intent is to allow students the opportunity to concentrate in a particular field of social welfare such as corrections, gerontology or mental health.

FACULTY OF LAW

Maureen A. Maloney, LL.B. (Warw.), LL.M. (Tor.), Associate Professor and Dean of the Faculty
Donald G. Casswell, B.Sc. (Tor.), LL.B. (York), LL.M. (Tor.), of the Bar of Ontario, Associate Professor and Associate Dean
Gerard A. Ferguson, B.A. (St. Patrick's), LL.B. (Ott.), LL.M. (N.Y.), of the Bar of Ontario, Professor
Douglas M. Johnston, M.A., LL.B. (St. And.), M.C.L. (McG.), LL.M., J.S.D. (Yale), Professor and Chair in Asia Pacific Legal Relations
John P.S. McLaren, LL.B. (St. And.), LL.M. (Lond.), LL.M. (Mich.), of the Bar of Ontario, Lansdowne Professor of Law
William A.W. Neilson, B.Com. (Tor.), LL.B. (Brit. Col.), LL.M. (Harv.), of the Bars of British Columbia and Ontario, Professor
T. Murray Rankin, B.A. (Queen's), LL.B. (Tor.), LL.M. (Harv.), of the Bar of British Columbia, Professor
Lyman R. Robinson, Q.C., B.A., LL.B. (Sask.), LL.M. (Harv.), of the Bar of British Columbia, Professor
Donovan W.M. Waters, Q.C., B.A., B.C.L., M.A. (Oxon.), Ph.D. (Lond.), F.R.S.C., Barrister-at-Law, Lincoln's Inn and the Bar of British Columbia, Professor
Terry J. Wuester, B.A. (Bethany Nazarene Coll.), M.A. (Missouri), J.D. (Kan.), LL.M. (Yale), of the Bars of British Columbia, Saskatchewan and Kansas, Professor
James L. Cassels, B.A. (Car.), LL.B. (W. Ont.), LL.M. (Col.), of the Bar of British Columbia, Associate Professor
John N. Davis, LL.B. (Tor.), M.L.S. (W. Ont.), of the Bar of Ontario, Associate Professor and Law Librarian
Hamar Foster, B.A. (Queen's), M.A. (Sus.), LL.B. (Brit. Col.), M. Jur. (Auck.), of the Bar of British Columbia, Associate Professor
Robert G. Howell, LL.B. (Well.), LL.M. (Ill.), of the Bar of New Zealand, Associate Professor
John R. Kilcoyne, LL.B. (U. of Vic.), LL.M. (York), of the Bar of British Columbia, Associate Professor
Sandra K. McCallum, B. Juris, LL.B. (Monash), LL.M. (Brit. Col.), of Bar of British Columbia, Associate Professor
Theodore McDorman, B.A. (Tor.), LL.B., LL.M. (Dal.), of the Bar of Nova Scotia, Associate Professor
Andrew J. Petter, LL.B. (U. of Vic.), LL.M. (Cantab.), of the Bar of Saskatchewan, Associate Professor
Andrew J. Pirie, B.A. (Wat.), LL.B. (Dal.), LL.M. (Well.), of the Bar of Ontario, Associate Professor
Mary Anne Waldron, B.A. (Brandon), LL.B. (Man.), LL.M. (Brit. Col.), of the Bar of British Columbia, Associate Professor
M. Cheryl Crane, B.A., LL.B. (Sask.), LL.M. (Cantab.), Assistant Professor
Mark R. Gillen, B.Com. (Tor.), M.B.A., LL.B. (York), LL.M. (Tor.), Assistant Professor
Hester A. Lessard, LL.B. (Dal.), LL.M. (Col.) Assistant Professor
Richard A. Rennie, C.D., B.Comm. (Brit. Col.), LL.B. (U. of Vic.), M.P.A. (Car.), Administrative Assistant and Admissions/Records Officer

Visiting and Adjunct Appointments:

William R. McIntyre, Q.C., LL.B. (Sask.), Honorary Professor
David R. Williams, Q.C., B.A., LL.B. (Brit. Col.), of the Bar of British Columbia, Adjunct Professor (1990-92)
E. Jack Woodward, B.A. (Brit. Col.), LL.B. (U. of Vic.), of the Bar of British Columbia, Adjunct Professor (1990-92)
R.M. John Orr, B.A., LL.B. (Brit. Col.), Dip. International Law (Cantab.), of the Bar of British Columbia, Visiting Associate Professor and Faculty Director, Clinical Program (1990-91)

The Faculty of Law offers a three year program leading to the Bachelor of Laws (LL.B) degree. The Faculty has been granted the status of 'an approved law school' by the governing bodies of the legal profession in the various common law provinces. This accords the Bachelor of Laws degree of the University of Victoria the same status as that of other common law schools in Canada.

APPLICATION FOR ADMISSION

Application forms for first admission to the University or for registration, and application packages for admission to the Faculty of Law are available from the office of the Dean. All applications must be submitted by March 31. However, applicants for first admission in the Regular category are strongly recommended to submit applications by December 31 of the preceding year as offers will be made during the months January through March of the year of Admission.

REQUIREMENTS FOR ADMISSION TO THE FIRST YEAR PROGRAM

Regular Applicants

The Faculty of Law may admit a candidate who:

1. presents proof of having received, with standing satisfactory to the Faculty of Law, a degree from the University of Victoria or an equivalent degree from a recognized university; or
2. presents proof of having completed, with standing satisfactory to the Faculty of Law, at least the first three years (forty-five units) of a program leading to a degree at the University of Victoria, or the equivalent at a recognized university.

In addition, each applicant must submit a Law School Admission Test score and satisfy such other requirements as may be prescribed from time to time.

NOTE: Since the number of candidates who meet the minimum requirements for eligibility far exceeds the number of places available, it should be understood that eligibility does not guarantee admission. Admission is decided on a competitive basis taking into account, principally, a candidate's prelaw academic record and Law School Admission Test scores.

Mature Applicants

A limited number of Mature Applicants will be accepted for admission in any one year notwithstanding that they do not possess the minimum requirements for admission as Regular Applicants. This category is not open to applicants who have met the requirements for admission in the Regular Applicant category.

Applications will be considered from individuals who:

(a) do not possess the minimum requirements for admission as Regular Applicants; and,
(b) have five or more years of work experience.

Applicants will be selected for admission on the basis of:

(a) the academic record, and the ability of the applicant to handle college or university level studies and to be successful in the study of law;
(b) the competence of the applicant in reading, writing, speaking and the ability to reason and analyze;
(c) the work record, including the capacity and ability to make a disciplined effort over periods of time;
(d) the Law School Admission Test scores; and
(e) the relationship of any work experience and the capacity of the applicant to make a contribution to the academic life or research programs of the Faculty of Law and to society or the community.

Applicants will be required to submit letters of reference; an interview may be required.

Special Applicants

A limited number of Special Applicants will be accepted for admission in any one year from applicants who possess the minimum academic requirements for Regular Applicants and who, by virtue of their experience and background, may be expected to make a particular contribution to the public or interdisciplinary aspects of law.

Applications will be considered from individuals who:

(a) possess the minimum academic requirements for admission as Regular Applicants; and,
(b) have five or more years work experience in a profession or other field of endeavour.

Applicants will be selected for admission on the basis of:

(a) the academic record, and the ability of the applicant to be successful in the study of law;

(b) the relationship of any work experience and the capacity of the applicant to make a special contribution to academic life or research programs in the Faculty of Law and to society or the community; and,
(c) the Law School Admission Test scores.

Applicants will be required to submit letters of reference; an interview may be required.

Native Applicants

The Faculty of Law is anxious that the number of people of Indian, Metis and Inuit backgrounds among the ranks of the legal profession increase substantially and, accordingly, encourages inquiries and applications from Native people.

Applications from Canadian Native people will be considered on an individual basis taking into account such factors as academic performance, results of the Law School Admission Test, employment history, potential for personal growth, personal interviews and letters of reference.

If an applicant's academic background makes it appropriate, the Admissions Committee may make any offer of admission conditional upon successful completion of the Program of Legal Studies for Native People conducted by the Native Law Centre at the University of Saskatchewan. The Faculty fully endorses this 'head start' program, and considerable weight is placed upon the evaluation submitted by its Director. It should be noted that all Native applicants of registered status and a limited number of nonstatus Native or Metis applicants are eligible for governmental financial assistance throughout both the Saskatchewan program and the LL.B. program at a Canadian Law School. This will cover tuition fees, books and other classroom materials, plus a modest living allowance. For more complete information concerning the Program of Legal Studies for Native People, interested applicants should write to:

The Director
Program of Legal Studies for Native People
Native Law Centre
University of Saskatchewan
Saskatoon, Saskatchewan
Canada S7N 0W0

Part Time Students

A limited number of students will be considered for admission in any one year from applicants who meet the admission criteria and admission standards of full time applicants in the Regular Applicant, Mature Applicant, Special Applicant and Native Applicant admission categories and who demonstrate to the satisfaction of the Faculty that they are unable to attend on a full time basis because of health or physical disability, or exceptional family or financial hardship.

COOPERATIVE EDUCATION PROGRAM

1. The University Regulations with respect to Cooperative Education Programs are applicable to the Faculty of Law Coop Program except to the extent that they are modified by regulations adopted by the Faculty of Law and approved by the Senate.
2. A student who registers in the Law Coop program must satisfactorily complete a minimum of three Coop Work Terms.
3. Students who have completed first year law at the University of Victoria or who are eligible to receive advanced standing credit at the University of Victoria for first year law are eligible to enroll in Law Coop.
4. Coop Work Terms shall normally alternate with academic terms. With the permission of the Law Coop Coordinator, a student may be permitted to enroll in a maximum of two consecutive Coop Work Terms or two consecutive academic terms.
5. The performance of students registered in a Law Coop Work Term shall be graded on the basis of COM, N or F.
6. The Faculty may require a student to withdraw from a Coop Work Term where the student's performance has not been satisfactory.

CONCURRENT LL.B./M.P.A. PROGRAM

Students who apply and are accepted into both the Law Faculty LL.B. and School of Public Administration M.P.A. programs may earn both degrees concurrently with modified requirements for each. The M.P.A. requirements are set out elsewhere in this Calendar.

The two degrees normally require five years of study whereas the concurrent degrees may be completed in four years. The first year of the program will be devoted entirely to the first year law curriculum. The second year of the program will be devoted to completion of the Public Administration foundation courses in combination with several law courses (normally 6 to 9 units). The remaining two years will be devoted to completion of all other Law and Public Administration course requirements.

Students in the concurrent degrees program must complete, after first year law, 29 units of law courses, or law-approved courses, including the following:

(i) Public Law Term (7½ units);
(ii) 3 units of Public Administration courses in lieu of the Law Faculty's 3 unit non-law course option in other Faculties; and
(iii) Public administration 598 (3 units) in lieu of 3 units of Law 399.

TRANSFER AND VISITING STUDENTS

Applications may be considered from students who wish to attend the Faculty of Law of the University of Victoria as Transfer Students or as Visiting Students. The Faculty of Law is not obliged to accept applications from students in these categories. The number of applications which are accepted will be limited in order to ensure that the size of the class which these students will be entering is not significantly altered.

A. Transfer Student Applications

Applicants who seek to transfer to the Faculty of Law must complete a minimum of two years of legal education in the Faculty of Law in order to obtain a Bachelor of Laws degree from the University of Victoria.

Applications shall be accompanied by:

(a) The academic record of the applicant, and
(b) The applicant's reasons and motivation for seeking to transfer to the Faculty of Law of the University of Victoria;

and will be considered if:

(i) The applicant meets all of the eligibility requirements for admission to the First Year Program of the Faculty of Law, and
(ii) The law courses which have been completed by the applicant are compatible with the curriculum of the Faculty of Law.

Preference will be given to students who are academically outstanding or who have the potential to make a unique contribution to the academic program of the Faculty of Law and to students who have applied on compassionate grounds. Students who have undertaken their previous legal education at a Canadian Law School will be given preference over applicants whose previous legal training has been undertaken outside Canada.

B. Visiting Students (Students with a Letter of Permission)

Applications from Visiting Students from another University may be accepted subject to the discretion of the Dean and their course programs being approved by the Deans of both Law Schools.

REGISTRATION

Inquiries relating to registration in the Faculty of Law should be addressed to the Administrative Assistant to the Dean of the Faculty of Law. The mailing address is:

Faculty of Law
University of Victoria
P.O. Box 2400
Victoria, B.C.
V8W 3H7

Completion of Registration

In addition to completing the procedures mentioned under the heading Requirements for Admission, all students are required to register at the times announced by the Faculty of Law. All new students, by their Letter of Admission and all returning students, by their Authorization to Reregister, will be informed of the time and place for registration. Students registering in the first year of the program are required to register in person.

All Letters of Admission or Authorizations to Reregister that are not used to register in the term or session to which they apply, have no further validity.

Registration in Any Course is Not Confirmed Until

(a) all course prerequisites have been met;
(b) the required registration procedures have been completed;
(c) all required fees have been paid (see Payment of Accounts, page 20); and
(d) classes in the course have begun and the student is in attendance.

The Faculty reserves the right to cancel the registration in a course of any student who fails to attend that course within seven calendar days of the commencement of the term, or of any student who is not able to demonstrate that all course prerequisites have been met.

A student who for medical or compassionate reasons is unable to attend a course during the first seven calendar days of the term may apply to the Dean within that time to confirm registration in that course and the Dean may confirm the registration.

Student Responsibility

Students are responsible for ensuring that their courses have been chosen in conformity with Calendar regulations. Also, all students are responsible for the completeness and accurancy of their registration. They must ensure that there is no discrepancy between the program they are following and the approved program recorded in the Dean's Office of the Faculty of Law, and that all changes in address and telephone number, are reported promptly to the Dean's Office of the Faculty which in turn will notify Records Services. Students may not take courses for which they have not registered, and many not drop courses without permission. Students who register in a course for which they have previously received credit or for which they have received equivalent credit on transfer, must indicate this by entering DUP (duplicate) on their registration forms.

A letter mailed to a student's address as currently on record in the Dean's Office of the Faculty of Law or Records Services will be deemed adequate notification to the student for all matters concerning the University.

Late Registration

The period for late registration in the Winter Session is the first five days of classes; in the Summer Studies, the first two days of classes.

Registration For Both Terms in Winter Session

Students planning to undertake studies in both terms of the Winter Session must register in September for all courses they intend to take, including single term courses beginning in January.

Changes In Registration

1. Students may add and drop courses during the first eight days of law classes in the First Term and during the first eight days of the Second Term upon submission of the appropriate change form to the Dean's Office of the Faculty of Law which in turn will notify Records Services.
2. Students may drop First Term courses until the last day of classes in October and Full Year and Second Term courses until the last day of classes in February provided that the student's program still meets the requirements of Regulations 4 and 5 pertaining to an approved program and provided they submit the academic change form to the Dean's Office which in turn will notify Records Services. Failure to notify the Faculty of Law by the specified date will result in the student receiving a failing grade for the courses.
3. Any student, who after registration decides to drop all courses, is withdrawing from the University and must notify the Dean's Office of the Faculty of Law in writing, which will in turn notify Records Services.

Concurrent Registration in Courses at Other Faculties of Law

With the approval of the Dean, or the Dean's nominee, students are permitted to register in a course(s) in the Faculty of Law at the University of British Columbia concurrently while enrolled in the Faculty of Law at the University of Victoria. Courses satisfactorily completed at the University of British Columbia will be granted credit towards their degree at the University of Victoria.

Temporary Withdrawal and Reregistration

Upon successful completion of an academic year and/or term, a student may on a single occasion elect not to continue in the LL.B. program for a single period not exceeding two academic years. With the permission of the Dean and/or Faculty, a student may be permitted to reenroll in either the First or Second Term of the Winter Session after such a stop out within the two year period. A student who does not reenroll in the LL.B. program within two academic years must reapply for admission to the Faculty.

When a student stops out after completing the First Term of Winter Session, the Regulations which are normally applicable to an academic year, including regulations for achieving standing in a year, shall be applied to a program consisting of the term completed prior to stopping out and the next term which the student completed after reenrollment.

If the student is enrolled in a course which spans both the first and second terms, the student will not be permitted to withdraw and retain credit unless the student has completed courses in the First Term which are worth at least 7 units. In no case may a student retain partial credit for a full year course which has not been fully completed.

When a student stops out after the completion of an academic year and the student reenrolls in the Second Term of Winter Session, regulations which are normally applicable to an academic year including regulations for achieving standing in a year, shall be applied to a program consisting of the term completed prior to stopping out and the next term which the student completed after reenrollment.

Registration in the Common Law-Civil Law Exchange Program

Students registering in and successfully completing the Civil Law/Common Law Summer Exchange Program may receive 2 units of credit towards their Law Program at the University of Victoria upon submission of official documentation confirming successful completion of the program. This credit will be applied to the year immediately following the completion of the Summer Program.

GENERAL INFORMATION

1. *Academic Studies*

The academic session in the Faculty of Law extends for approximately thirty effective teaching weeks exclusive of examination periods.

2. *Grading*

	Grade	Grade Point Value	
Passing Grades	A+	9	
	A	8	First Class
	A-	7	
	B+	6	
	B	5	Second Class
	B-	4	
	C+	3	
	C	2	Pass
	D	1	
	*COM	N/A	Complete (pass)
Failing Grades	F	0	
	*N	0	Did not write examination or otherwise complete course requirements by the end of the term or session; no supplemental
Temporary Grade:	*DEF	N/A	Deferred examination granted

* COM —
Used only for courses designated by the Senate. Such courses are identified in the course listings.

* N —
in exceptional circumstances, the Faculty may authorize the removal of an N grade and the replacement of it by another grade. In accordance with Senate Regulations, an instructor shall advise students at the beginning of term of the circumstances under which they would be assigned a final grade of N.

* DEF —
Used only for courses in which a deferred examination has been granted because of illness or other special circumstances.

3. *Review of an Assigned Grade*

Students are referred to the general University regulations given on page 18 and to the regulations adopted by the Faculty of Law. The following regulations apply to students in the Faculty of Law.

(a) Any request for a review of a final grade must normally reach the Dean's office within 21 days after the release of grades by the Dean's Office.

(b) Where a final grade is based wholly or in part on any written materials other than an examination paper, such materials shall, for the purpose of these procedures, be treated as if they are examination papers.

4. *First Year Program*

All courses in the First Year Program are compulsory.

Full time students must enroll in all courses in the First Year Program.

In the first academic year of attendance, part time students must enroll in courses amounting to not less than 7 units of courses including 104 (2) The Law, Legislation, and Policy; 106 (1) Legal Process; and 110 (1) Legal Research and Writing. In the second academic year of attendance, part time students must complete the remainder of the compulsory First Year program.

5. *Second and Third Year Programs*

(a) The Faculty of Law may designate courses as compulsory, prerequisite, or recommended courses.

(b) In each of the second and third years of the program, a student shall enroll in a course program which has been approved by the Dean or the Dean's nominee.

(c) An approved program for a full time student under paragraph (b) is one in which a student is enrolled in courses totalling not less than 14½ units and not more than 16½ units over the academic session (that is, during the thirty week period). An approved program for a part time student under paragraph (b) is one in which a student is enrolled in courses totalling not less than 7 units and not more than 14½ units, over the academic session (that is, during the thirty week period).

(d) Without the permission of the Dean or the Dean's nominee, a full time student may not carry less than 7 units or more than 8½ units in one term per session (that is, during the fifteen week period). Without the permission of the Dean or the Dean's nominee, a part time student may not carry less than 3 units or more than 7 units in one term per session (that is, during the fifteen week period).

(e) In order to complete the requirements of the Program, a student must enroll in approved programs for the Second and Third Year which amount in the aggregate to not less than 29 units.

6. *Standing*

(a) Standing in First, Second or Third Year shall be granted when,

(i) a student passes all of the courses in the student's approved program for the year and does not have any N or DEF grades in any course, and,

(ii) a student obtains a grade point average of at least 3.00 in the courses not graded on a pass/fail (COM, N, or F) basis.

In addition to satisfying the requirements of the preceding paragraph part time students in Second Year or Third Year must satisfy the following requirements at the end of each academic session. In order to proceed to the next academic session a part time student must pass all of the courses in the student's approved program for the academic session and attain a grade point average of at least 3.00 in the courses for the academic session.

(b) Standing in the Program shall be granted when a student achieves Standing in each of the First, Second and Third Years and completes a research paper on an approved subject of not less than 7,500 words during either the Second or Third Year upon which the student has received a grade of C+ or better. The requirement may be satisfied in the context of existing courses.

7. *Supplemental Examinations*

(a) Where a full time student does not achieve standing under Regulation 6 above, but attains a grade point average of at least 2.00, the student shall be permitted to write supplemental examinations in not more than

(i) two courses (including Private Law Process), or

(ii) two separate components of Private Law Process, or

(iii) one course (except Private Law Process) and one component of Private Law Process representing not more than six units, in order to obtain the standing required. Where a part time student does not achieve standing or satisfy the requirements under Regulation 6 above, but attains a grade point average of at least 2.00 the student shall be permitted to write one supplemental examination.

(b) Where a student, enrolled in a clinical program or other course exclusively for a term (15 weeks), fails to meet the grade requirement of Regulation 6, the matter shall be referred to the Faculty or a committee thereof. The Faculty, after considering the recommendation of any committee to which the matter has been referred may confirm the failing grade or may permit the student to undertake any one or more of the following:

(i) supplemental examinations,

(ii) the completion of such assignments, papers or tests as may be appropriate, or

(iii) remedial work designated by the Faculty.

Where, in the opinion of the Faculty, the student's conduct or lack of competence in the clinical program or course may adversely affect members of the public or personnel including students associated with the program or course, the Faculty may prohibit the student from re-enrolling in the program or course or the Faculty may require the student to withdraw from the Faculty.

(c) Subject to paragraph (d), supplemental examinations shall not be written in courses or Private Law Process components where a student has attained a grade of C+ or better.

(d) If a student elects to write a supplemental examination in the Private Law Process course, the student shall write all three components whether or not a grade of C+ or better has been obtained in one or more components. However, an overall grade of C+ or better in the Private Law Process course shall not bar a student from electing to write a supplemental examination in a separate component of Private Law Process where the student has not obtained a C+ or better.

(e) The grade point value for supplemental examinations shall be determined in accordance with the grading scale contained in the Regulations of the Faculty of Law. The original sessional grade point average and a revised sessional grade point average, taking into account the supplemental examination results, shall be recorded on a student's transcript.

8. *Special Examinations*

(a) Subject to subsections (b) and (c), the Faculty may authorize the writing of Special Examinations to achieve standing under Regulation 6 where the Faculty determines that a student's ability to write or to complete an examination or other academic requirement has been affected by illness, family affliction or other special circumstances.

(b) A request for a Special Examination under subsection (a) must be made in writing to the Dean within five days after the date on which the original examination was written or was to be written, or within five days after the date on which the other academic requirement was due, and the student must provide a physician's report or other substantiating document as soon as possible.

(c) For the purposes of providing evidence to the Faculty as to the nature of the illness and the effect of that illness upon the student's ability to complete an examination or other academic requirement, the physician's medical report should be made on the form approved by the Faculty of Law for that purpose wherever possible. Where the form provided by the Faculty of Law is not used, the medical report should contain the kinds of information sought on that form.

(d) Where a student has written an examination, a request for a Special Examination under (b) shall be confirmed or withdrawn by the student within ten days after marks have been released by the Dean's Office. Where the request is not confirmed within that ten day period, it shall be deemed to have been withdrawn.

(e) Special Examinations for the year are normally written in early August.

(f) Students will be advised in writing with respect to procedures to be followed in such cases.
(g) The mark obtained on a Special Examination or other academic requirement written pursuant to this regulation will replace only the mark the student had or would have had on that component of the course.

9. *Credit for Courses Outside the Faculty*

(a) A student may, in the second and third year, take courses in other departments and schools in the University for credit in the Faculty of Law. A student may not take Summer studies courses for credit unless that student is enrolled full-time in the Law academic summer term, in which case Faculty regulations respecting approval and unit limit for those courses shall apply as if the course were taken in a fall or winter term of the LL.B. Program.
(b) A student may take up to 3 units of such courses over the two academic years;
(c) A student must obtain the approval of the Dean of Law or the Dean's nominee and the outside instructor in advance of registration for any such course. The approval of the Dean or the Dean's nominee is based upon criteria set out in Faculty regulations.
(d) A student enrolled in the concurrent LL.B./M.P.A. program may take an additional 3 units of Public Administration 598 in lieu of 3 units of Law 399.

10. *Repetition of a Year*

A student who fails to obtain standing in any Year may apply to the Faculty for permission to repeat the Year.

11. *Special Provision*

Notwithstanding anything contained in these regulations, the Faculty shall exercise an equitable discretion in a particular case so as to achieve a fair and reasonable result.

12. *Other Academic Regulations*

Students registered in the Faculty are subject to such other general academic regulations of the University as the Senate, on the recommendation of the Faculty, may wish to apply.

13. *Part Time Students*

A student who is admitted as a part time student may not become a full time student until the student has achieved standing in First Year.

In order to continue as a part time student after achieving standing in First Year, a student is obliged to demonstrate to the Faculty at the beginning of each academic session that he continues to be unable to attend on a full time basis because of health or physical disability, or exceptional family or financial hardship.

A student who achieved standing in First Year as a full time student, may apply to continue his studies as a part time student. The Faculty may allow a limited number of these students to enroll as part time students upon being satisfied that a student is unable to continue as a full time student because of health or physical disability, or family or financial hardship.

14. *Temporary Withdrawal of Students Enrolled in Law Centre Clinical Program Pending Report*

Where, during the course of a term, there are reasonable grounds to believe that the conduct or lack of competence of a law student enrolled in the Law Centre Clinical Program has adversely affected or may adversely affect,
(i) clients of the Law Centre,
(ii) personnel including students associated with the Law Centre,
(iii) the Law Centre's relationship with the judiciary or members of the practising bar,
the Dean may require a student to withdraw temporarily from the Law Centre Clinical Program pending the receipt of a report on the conduct and lack of competence of the student.

15. *Faculty May Require Student to Withdraw from Law Centre*

After giving the student an opportunity to be heard, the Faculty may require a student to withdraw from the Law Centre Clinical Program where the Faculty is satisfied that the student's conduct or lack of competence may adversely affect members of any of the groups identified in Regulation 14.

16. *Grade of N in Law Centre Clinical Program*

Where the Faculty requires a student to withdraw from the Law Centre Clinical Program, a grade of N shall be entered on the student's academic record and transcript.

17. *Concurrent LL.B./M.P.A. Degrees*

Students enrolled in the concurrent LL.B./M.P.A. program will be subject to the above Law Faculty regulations *mutatis mutandis* in regard to their LL.B. course requirements. Grade point averages for the purposes of these regulations or for the purposes of awarding Law Faculty prizes and scholarship will be calculated only on their LL.B. course requirements.

COURSES

Students should consult the Faculty concerning courses to be offered in any particular year.

LAW 100 (3) THE CONSTITUTIONAL LAW PROCESS

This course deals with the basic framework of the Canadian constitutional system and illustrates that the constitution is the skeletal framework within which the legal system functions. The function of a constitution, the main characteristics of constitutions and Constitutional Law, entrenchment, amendment, the nature and structure of the B.N.A. Act, the division of powers, concurrency in a federal state, the sources of Canadian Constitutional Law, executive power, legislative authority, delegation, the role of the judiciary, civil liberties, developing issues in Constitutional Law. (Full year course 75 hours)

LAW 102 (2) THE CRIMINAL LAW PROCESS

The course is an introduction to Criminal Law and its process as a means of sanctioning prohibited conduct. Attention is directed to the following matters:

1. The reporting of crime including some discussion of the common characteristics of offenders and offences.
2. The role of the police and the prosecutor in the pretrial portion of the process including such matters as arrest, search and seizure, and the discovery of evidence.
3. The aims and purposes of the Criminal Law and the role of the lawyer in the Criminal Law process.
4. The substantive Criminal Law including the ingredients of criminal offences and the application of the various defences which are available.
5. Theories of punishment and practices of disposition and sentencing of offenders.

Students may be asked to spend up to ten hours in a field experience either in the courts, with police, or in corrections. Students are required to keep a journal in connection with this part of the course.
(Full year course 60 hours)

LAW 104 (2) THE LAW, LEGISLATION AND POLICY

Students are given an historical introduction to the doctrine of parliamentary sovereignty and an overview of the development of responsible government at the Provincial and Federal levels. The course examines judicial approaches to statutory interpretation including the canons, rules and presumptions and introduces students to the development of elementary legislative drafting skills. The preparliamentary stages of legislation, the institutions involved in law making and the sources of policy in both federal and provincial governments will be studied. The parliamentary stages of legislation and some aspects of parliamentary procedure will be examined together with criticisms of the parliamentary system and proposals for reform. (Full year course 60 hours)

LAW 106 (1) THE LEGAL PROCESS

The Legal Process seeks a perspective of the processes of decision making throughout the legal system by examining its major institutions and the function of substantive and procedural law within them. It attempts to provide first year students with a transactional "overview" of their new discipline in its totality. It also provides a background for courses in the second and third year program. This course introduces students to the institutional structure of the Canadian legal system and, at the same time, provides an analysis of the role of law in society. The course will have a variety of components, namely historical, institutional, procedural and philosophical. The role of law in society, the

function of the legal profession, the development of the legal system, the reception of English Law in Canada, the contemporary legal system in British Columbia, the structure of the courts, problems of fact finding and evidence stare decisis, sources of law, the legislative process, administrative tribunals, an introduction to jurisprudential concepts, future trends with respect to the role of law in society, including law reform, legal services, the legal profession, access to the law.
(Grading: COM, N, or F)
(Full year course 30 hours)

LAW 108 (6) THE PRIVATE LAW PROCESS
These courses concentrate upon some of the basic rules or processes which regulate the relationships between private citizens. There is an attempt to integrate and interrelate many of the basic concepts normally covered in Contracts, Property, and Torts.

108A	(2 units)	Contracts	(full year)
108B	(2 units)	Property	(full year)
108C	(2 units)	Torts	(full year)

(Full year course 200 hours)

LAW 110 (1) LEGAL RESEARCH AND WRITING
The purpose of the course is to acquaint the first year student with the variety of materials in the Law Library and to provide a knowledge of basic legal research techniques. The use of various research tools, including the computer, is considered. Through a variety of written assignments, the students will become familiar with accepted principles pertaining to proper citation in legal writing and will develop a degree of profiency in legal writing and research. (Full year course 30 hours)

Some of the following courses have not yet been offered but have been approved and will be offered when resources permit. Some of these courses are offered in alternative years.

LAW 301 (2) THE ADMINISTRATIVE LAW PROCESS
This course will seek to investigate the nature and function of the administrative process with particular reference to the development of tribunals and agencies with a wide variety of disparate functions and interactions with private life. Similarly, the course will investigate the way in which tribunals and courts interact, with specific reference to the judicial arsenal available for the control of administrative behaviour.
(4-0)

LAW 302 (1½) CRIMINAL LAW: II
This course builds naturally upon the first year course in the Criminal Law Process with specific reference to defences and offences. In depth study of such matters as conspiracy, attempts, counselling, as well as the substantive offences of homicide, fraud, and contempt of court, will be carefully analyzed. Major defences, including double jeopardy, insanity, automatism and self defence will be scrutinized. (3-0)

LAW 303 (1½) CRIMINAL PROCEDURE
Procedural protections pervade the area of Criminal Procedure. It is crucial that an advocate intending to act on behalf of a client in a criminal matter be aware, not only of the specific mechanics of criminal procedure, but of its underlying philosophy and goals. Hence the course will undertake a study of such matters as jurisdiction, election and reelection, particulars, discovery, the indictment, plea bargaining, abuse of process, juries, the trial and appellate processes. (3-0)

LAW 304 (5½-7½) CRIMINAL LAW TERM
This course will provide students with a comprehensive understanding of the criminal process from its inception through the trial process and the corrections system. It is an intensive immersion program which will consider criminal procedure, sentencing and corrections, substantive criminal law, trial process and the law of evidence. Through a flexibly-designed program, students will consider all the major issues confronting the administration of criminal law. (11-0) to (15-0)

LAW 307 (1½ or 2) CIVIL PROCEDURE
This course will be founded upon an inquiry into the functions of a modern procedural system with specific reference to the development of a process which considers the extent to which the specific system under study aids in the achievement of just, speedy and economic resolutions of justiciable conflicts on their merits. Students will be introduced to the basic structure of a civil action and major items for consideration throughout the development of civil litigation. In the result, such matters as the expenses of litigation, jurisdiction, initial process, pleadings, amendment, joinder, discovery, disposition without trial and alternatives to adjudication will be discussed. (1½ units or 2 units depending upon whether the course includes a concentration in drafting)

307A (1½) Regular programs (3-0)

307B (2) Concentration in drafting (4-0)

LAW 309 (2) THE LAW OF EVIDENCE
This course will examine the objective structure and content of the law governing proof of facts in both civil and criminal trials, as well as before administrative tribunals. Rules of evidence respecting burdens of proof and presumptions, competence and compellability of witnesses, corroboration, hearsay, character, opinion evidence and a variety of other topics will be critically examined in the light of objectives of the legal process. (4-0)

LAW 312 (1½) DEBTOR AND CREDITOR RELATIONS
The course will discuss legal aspects of the collection of judgments; use and problems of mechanic's liens; fraudulent transactions, both under provincial and federal law; creditor's arrangements; debtor assistance programs; and bankruptcy. (3-0)

LAW 313 (1½) SECURITIES REGULATION
An overview of the law and policy aspects of securities regulation including the initial distribution of securities, the regulation of secondary market trading, takeover and issuer bid regulation, and the regulation of securities market intermediaries. (3-0)

LAW 314 (1) SALE OF GOODS
This course involves the study of the law pertaining to the sale of goods including an examination of the Sale of Goods Act, the Trade Practices Act and the Consumer Protection Act. (2-0)

LAW 315 (2½) BUSINESS ASSOCIATIONS
This course will analyze and discuss various legal forms for carrying on trade. The course recognizes that the corporation is one of immense commercial and legal significance as an organizational form and will hence stress legislation and materials respecting the modern company. Students will, however, be exposed to the sole proprietorship, partnership and related agency principles. (5-0) or (2-0; 3-0)

LAW 316 (2) SECURED TRANSACTIONS AND NEGOTIABLE INSTRUMENTS
An examination of various forms of chattel security; chattel mortgages, conditional sales, assignment of book debts, debentures, s.178 of the Bank Act; personal guarantees; the law of negotiable instruments.
(4-0)

LAW 317 (2) REAL PROPERTY TRANSACTIONS
This course will adopt a transactional perspective and analyze the development of a real property transaction from its inception to post completion problems. Specific reference will be had to listing the property for sale and the responsibilities and obligations of the agent under the Real Estate Act, specific matters relating to the interim agreement, financing of the purchase and assessment of title, as well as preparation of the file for closing. Brief consideration will be given to condominium law and landlord and tenant relations. (4-0)

LAW 318 (1½) REMEDIES
This course seeks to highlight the interaction between the various substantive areas of private law: torts, property, contract and restitution. Additionally, the interaction between the common law and equity systems will be developed conceptually and historically. The course will concern itself with questions regarding damages, specific remedies, restitution, as well as analysis for alternative methods of remedial action through compensation schemes. (3-0)

LAW 319 (1½) TRUSTS
This course concerns the trust as a mode of disposition of property for the benefit of successive or single beneficiaries, and the contrast is made with absolute dispositions. Comparison is made with other concepts of obligation and property holding. The creation, administration, variation

and termination of express trusts are examined, and also the theory and applicability of resulting and constructive trusts. (3-0)

LAW 320 (1½) SUCCESSION AND ESTATE PLANNING
This course involves the study of testate and intestate succession. The principles of the law of wills, both common law and statutory, and the statutory provisions for the devolution of intestate estates, will be examined. The drafting of wills is a feature of this course. Estate planning involves a general examination of the disposition of assets in life and on death against the background of income, inheritance and gift taxes. (3-0)

LAW 321 (1½) COMPETITION LAW
This course will trace the development of competition law from the common law doctrines of restraint of trade through the areas of trademarks and statutory regulation of competitive practices contained in anticombines and competition law, with an examination of the policy and theory underlying government regulation of restrictive trade practices. (3-0)

LAW 322 (1½) FAMILY LAW
This course will consider the institution of the family, both in its social and legal contexts. Specific reference will be had to law relating to marriage, divorce, custody, matrimonial property and the role of the lawyer in the resolution of family problems. This is a course which is ideally suited to interdisciplinary team teaching in order that the course may helpfully illustrate the impact of legal decision making on the social unit of the family. (3-0)

LAW 324 (1) CHILDREN AND THE LAW
Considering such questions as adoption, affiliation, child protection, juvenile delinquency, custody and access, this course will focus upon the impact of law and legal institutions on children and their relations in society. The course will attempt to bring the knowledge and expertise of specific, related disciplines to bear upon the development of law and the legal institutions in this area. (2-0)

LAW 326 (2) EMPLOYMENT LAW
This course offers an introduction to three legal regimes bearing upon the employment relationship:

(1) the common law;
(2) collective bargaining law; and
(3) regulatory schemes in such fields as employment standards, human rights and occupational health and safety.

A major theme of the course is the relative strengths and weaknesses of these three regimes and the legal institutions charged with their administration. (Not open for credit to students who have credit for 326 prior to 1985-86) (4-0)

LAW 327 (1½) JURISPRUDENCE
A wide variety of topics may be considered in this course in order to develop a theoretical framework for the purpose and function of law in society. Various schools of jurisprudential thought will be analyzed, including the Natural Law school, the Positivist school, Pure Theory school, the Sociological school, the American and Scandinavian Realist schools as well as Historical and Anthropological Jurisprudence. (3-0)

LAW 329 (1½) ENVIRONMENTAL LAW
The course builds upon courses in Torts, Property and Administrative Law. Certain aspects of the land use planning and resource laws are pertinent. The various legal techniques to contain environmental disruption will be critically examined, including common law liability rules and various statutory models which have evolved, including prohibition, licensing, economic incentives, effluent charges and compensation systems. Environmental impact assessment legislation will also be studied. (2-0)

LAW 330 (1½) INTERNATIONAL LAW
Public International Law is concerned with the legal relations of states and the individuals who compose them. The course seeks to explore the way in which sovereign powers choose to govern their interrelationships and analyzes problems which confront them. Topics will include an examination of the international legal system, modes of international law creation and law enforcement as well as the process of international adjudication. (3-0)

LAW 331 (1½) COASTAL AND MARINE LAW
This course considers various problems in coastal and marine law. Topics covered may include maritime liens, salvage, tug and tow, charter parties and other commercial documents, marine insurance, regulation of commercial fisheries, protection of and planning in the marine environment. (3-0)

LAW 332 (1½) INTERNATIONAL BUSINESS AND TRADE LAW
International trade constitutes a crucial 30% of Canadian economic activity and this course will examine the major legal aspects of international trade from a private law perspective. The major emphasis is on the private law of an international sales transaction: terms of trade, carriage of goods, letters of credit, and commercial arbitration. The course is also expected to cover public international law issues regarding GATT and Canada's trade options. (3-0)

LAW 333 (1½) SOCIAL WELFARE LAW
The course is an introduction to the statutory framework of social welfare law. Topics include Workers' Compensation, Social Security, Unemployment Insurance, Welfare and Health Care legislation. (3-0)

LAW 336 (1) COLLECTIVE AGREEMENTS: NEGOTIATION ARBITRATION
A study of the negotiation and administration of collective agreements in the private sector. Topics will include labour negotiation theory, bargaining structure, grievance resolution, contract interpretation, individual rights and the role of the Labour Relations Board. (2-0)

LAW 337 (1 or 1½) DISPUTE RESOLUTION: THEORY AND PRACTICE
This course will examine the forms and functions of major disputing processes — mediation, negotiation and adjudication. These are the processes which are critical to lawyers and other persons concerned with preventing or resolving disputes. Both court adjudication and alternative dispute resolution (ADR) will be studied from theoretical, critical and practical perspectives. The course will also examine and develop the skills used in various dispute resolution procedures. (2-0) or (2-1)

LAW 339 (1½) LEGAL THEORY WORKSHOP
This seminar explores the interdisciplinary nature of legal studies by considering the contributions of 20th century social theory to legal thought. Topics which will be canvassed include analyses of law and legal systems from sociological, economic and philosophical perspectives. (3-0)

LAW 341 (1½) NATIVE LEGAL ISSUES
This seminar introduces students to treaties, common law, constitutional and statutory law in relation to aboriginal title and native rights. Specific reference will be made to reserve lands, property interests, hunting and fishing, family law, culture and religion. (3-0)

LAW 342 (1½) IMMIGRATION AND REFUGEE LAW
This course examines immigration and refugee law, policy and practice. Topics considered include the historical perspective, constitutional jurisdiction, the admission of immigrants, visitors and refugees, exclusion and removal, the acquisition of citizenship and the process of inquiries, appeals and judicial review. Relevant aspects of international law are covered. Students will be given an opportunity to consider immigration and refugee law from a comparative perspective, with particular focus on the Asia-Pacific region. (3-0)

LAW 343 (1-2) CONTEMPORARY ISSUES IN LAW
This course is concerned with legal issues which are contemporary and problematic. Each issue will be examined in the light of existing legal rules, social and related implications, the legal process, and possible reform. (The unit value of the course may vary from 1, to 1½, to 2 units per term. Students may take the course for credit more than once to a maximum of 4½ units of credit.) (2-0) to (4-0)

LAW 344 (1½) INSURANCE LAW
The course will examine the theory and elements of the practice of

insurance law, with reference to the most common forms of both first party and third party insurance: property, life and motor vehicle insurance. (3-0)

LAW 345 (2) TAXATION
The course will strive to cover the basic principles of income tax law including such issues as taxable income, residence income from employment, business or property, and capital gains. It will also deal in a general way with policy underlying certain aspects of the Income Tax Act and will provide an introduction to certain specific provisions of that Act, concentrating primarily on personal income tax law. (4-0)

LAW 346 (1) ADVANCED TAXATION
This course builds upon the concepts studied in Taxation (345) and is concerned primarily with the Income Tax treatment of business organizations, particularly corporations and partnerships, and their investors. (2-0)

LAW 347 (1½) INTELLECTUAL PROPERTY
A study of the concept of intellectual property and the principles and policies of selected areas of intellectual property law, primarily: (a) registered trade marks and related common law provisions and (b) copyright in its categories of "literary", "dramatic", "musical", and "artistic" works and with a focus upon new technologies such as photocopying, videotaping and computer programming. In addition, the course includes a brief introduction to the law and policies of patents, industrial designs and confidential information. Where appropriate, attention is drawn to the interrelationship and boundary issues between the categories that together comprise the subject of intellectual property. (3-0)

LAW 350 (7½) CLINICAL TERM
Clinical legal education is predicated upon the assumption of a recognized role within the legal system by the law student. The experience gained from the participation in the role becomes the focus for reflection and examinations of substantive legal rules, procedural and strategical positions, and introspective critical analysis of the role of the lawyer in the legal process. This requires a carefully supervised program with manifold opportunities for one to one instructor student supervision and regular group sessions. Programs envisaged would take place in a community law office.

350A (7½) Community Law-Legal Aid Clinic (Grading: COM, N or F) (15-0)

LAW 351 (5½-7½) PUBLIC LAW TERM
This course will provide a forum for the development of a comprehensive understanding of the nature of policy formulation and decision making in governmental departments and agencies as well as the role of the lawyer in the context of the administrative and legislative processes. The course will focus on selected areas of governmental activity and will examine the evolution of public law and the conflicting values involved in the regulation of contemporary society, the emerging dominance of the executive branch of the government and the professional responsibility of the lawyer as advocate, legislator, counsellor, lobbyist, administrator and policy adviser. A clinical placement may be arranged for each student. (11-0) to (15-0)

LAW 352 (3-7½) BUSINESS LAW AND PLANNING TERM
This is an intensive course. It examines several advanced areas of law which pertain to a solicitor's practice with particular reference to areas of corporate and commercial law. The subjects are studied from a transactional perspective. (6-0) to (15-0)

LAW 355 (2) LEGAL SKILLS
The course uses materials from substantive law to examine and develop the skills of the lawyer in interviewing, counselling and negotiating. (Grading: COM, N, or F) (4-0)

LAW 356 (2) ADVOCACY
This course will involve a critical analysis of the trial process including the demonstration and evaluation of various techniques of advocacy and their relationship to the law of evidence and procedure. In particular, the objectives and techniques of pretrial motions, examinations for discovery, examination and cross examination of witnesses, exhibits, and the presentation of legal argument will be considered. (Grading: COM, N, or F) (4-0)

LAW 359 (1½) CIVIL LIBERTIES AND THE CHARTER
This course will examine the relationship between government and the individual. The major emphasis will be upon the development and protection of civil liberties and human rights in Canada. Reference may also be made to Human Rights Legislation and International Agreements. (3-0)

LAW 360 (1½) THE LEGAL PROFESSION
This course is designed to provide students with insights and perspectives into the organization and operation of the legal profession as a vital institution in the legal process. The class will be asked to consider the legal profession in its social context, its formal organization, its ethical procedures, and the role of the lawyer throughout the legal process. It appears to many that the role of the professions in general is changing. A consideration of this issue is focused upon the legal profession. (3-0)

LAW 361 (1½) HISTORICAL FOUNDATIONS OF THE COMMON LAW
The development of English legal systems have had a profound impact on Canada as well. Beginning with 11th century European developments, the course will consider a number of topics, such as Anglo-Saxon England and the Norman Conquest, the development of common law and equity, criminal law and 19th century developments, ending with some analysis of the "reception" of English law in the colonies. (3-0) or (2-1)

LAW 362 (1½) CANADIAN LEGAL HISTORY
This course addresses a series of selected themes in Canadian Legal History, especially the theoretical diversity of Canadian legal historiography and the place of Legal History within the broader context of Canadian political, social, economic, cultural and intellectual history. (3-0)

LAW 363 (1½) CONFLICT OF LAWS
This course seeks to illustrate problems arising out of the interaction of laws and legal systems. Such important questions as choice of law, recognition of foreign judgments, doctrines of domicile and renvoi will be investigated in order to develop an understanding of the choices and values inherent in decision making in this area. (3-0)

LAW 365 (1-2) LEGAL MOOTING
A student may be awarded credit in the second and third years of the student's program to a maximum of 2 units in either year and 2½ units in the student's entire program for supervised participation in interuniversity mooting competitions designated by the Dean.
(Grading: COM, N, or F) (2-0) to (4-0)

LAW 370 (1½) ASIA-PACIFIC LAW
The theory and methodology of Comparative Law will be introduced and then the historical, cultural, political, economic and other factors of legal development in four major areas of the Asia-Pacific Region will be explored: Northeast Asia, Southeast Asia, South Asia and the Southwest Pacific. ASEAN countries will be considered in more detail. The final part of the course will focus on one or two areas of the law, such as criminal law, family law or intellectual property, and on one or two selected countries. (3-0)

LAW 388 (1½) ADVANCED LEGAL RESEARCH & WRITING
This course will build upon the research and writing skills learned in the first year. Students will explore a wide range of research sources, both legal and nonlegal, including computer assisted legal research. Students will analyse various types of legal writing. The importance of context, organization and audience in legal writing will be stressed. Parts, sections or clauses of written documents will be analyzed, evaluated, criticized, edited and rewritten to improve and develop the students' analytical and writing skills. (3-0)

LAW 391 (1-2) SUPERVISED GROUP PROJECT
Third year students may undertake a program of supervised group study as a basis for working through some common interest in law. Groups

may be formed at student initiative but require the agreement of a faculty member to act as supervisor. Groups should be formed early in the winter term of the academic year previous to the academic year so that the necessary planning can be done and approvals secured. Students wishing to form a group are responsible for securing the consent of a faculty member to act as a supervisor. Groups must have a minimum of six members and ordinarily will have a maximum of twelve members. The Dean must approve the formation of groups. Students who are contemplating the formation of groups should discuss their plans with the Dean or Associate Dean. (2-0) to (4-0)

LAW 399 (1-4) SUPERVISED RESEARCH AND WRITING

During either of the second or third years of a student's program, a student may undertake a substantial research and writing project on a legal subject approved by a member of the Faculty of Law who agrees to supervise the project. With the approval of the Dean or the Dean's nominee: (1) a student may be awarded credit for two separate supervised research papers provided that the total credit does not exceed 4 units and each paper is started and completed in separate terms; (2) this course may be extended over two terms; and (3) if this course is to be taken for 1 unit only.

FINANCIAL AID

GENERAL REGULATIONS

All inquiries concerning material in this section should be directed to the Student Financial Aid Services Office, University of Victoria, Box 3025, Victoria, B.C. V8W 3P2.

All bursaries adjudicated by the University of Victoria are administered by the Senate Committee on Awards. Grants, loans and work-study positions are administered by the Student Financial Aid Services staff.

To be eligible for a bursary offered by the University, students must take an appropriate number of units in the Winter Session, normally 15. If, however, students can demonstrate that they are carrying the maximum course load possible in the circumstances, exceptions can be made to this stipulation. All students who are taking fewer than 15 units during the Winter Session and who wish to be considered for a bursary must have an interview with an adviser from the Student Financial Aid Services Office.

Where applications are necessary, the deadline for submission of application forms is specified for each bursary.

Except where the donor directs otherwise, the proceeds of bursaries issued by or through the university will be applied towards the total fees for the academic year. If the amount of the bursary or bursaries exceeds the unpaid total fees for the academic year, the excess balance will be paid to the student. Proceeds from government loans, grants and work study are paid directly to the student.

Any awards may be withheld or cancelled for any of the following reasons: lack of suitable candidates; failure to meet terms and conditions of award; withdrawal from the University; withdrawal of the award by donor.

If for any reason the original recipient becomes ineligible, the allocated funds may be reassigned to other students.

DEFINITIONS

(a) An award based on financial need is any bursary, grant, loan or work study position.
(b) A bursary is a nonrepayable monetary award based on financial need and reasonable academic standing, as determined by the Senate Committee on Awards.
(c) A grant is a nonrepayable monetary award based on financial need as determined by the office or agency mentioned in the award.
(d) A loan is a repayable monetary award based on financial need.
(e) A work study position is a subsidized job on campus, allocated on the basis of financial need as demonstrated on a British Columbia Student Assistance Program form.

SECTION 1

THE UNIVERSITY OF VICTORIA TUITION ASSISTANCE BURSARY FUND FOR ALL STUDENTS

This fund was established by the Board of Governors in 1965, who at that time expressed concern that qualified students could not attend the University of Victoria because of serious financial difficulties. Specifically, the Board indicated:

(a) that the Fund is intended to assist students who are in serious financial difficulty
(b) that applicants be interviewed by an officer of the University;
(c) that students should not normally expect to receive assistance unless they meet the need criteria established by the B.C. Student Loan Committee. Where there are special circumstances, appropriate consideration will be given, and each case will be judged on its own merits.

Application forms are only available after registration from the Student Financial Aid Services Office, Second Floor, University Centre. Completed application forms are to be submitted by November 15 in the First Term, and by February 15 in the Second Term. Forms should be submitted in person so that an appropriate time for an interview may be arranged.

SECTION 2

ENTRANCE BURSARIES REQUIRING APPLICATION

A. ENTRANCE BURSARIES ADMINISTERED BY THE UNIVERSITY OF VICTORIA

Application forms for the following bursaries may be obtained from the Student Financial Aid Services Office, University of Victoria, Box 3025, Victoria, B.C. V8W 3P2, and must be returned by June 30, unless otherwise indicated.

* SARA AND JEAN MACDONALD BURSARY FUND — This fund provides five bursaries valued at $450 each for worthy and deserving women students entering the University of Victoria from secondary schools. Selection is to be made by the Committee on Awards on the basis of financial need and recommendations from secondary schools.

PACIFIC COAST FISHERMENS MUTUAL MARINE INSURANCE COMPANY BURSARY — Bursaries of $600 are offered by Pacific Coast Fishermen's Mutual Marine Insurance Company to sons, daughters and legal wards of past and present members of this insurance company. They are open to students entering the University from Grade I. The application must be accompanied by a letter describing the family fishing history in general terms and detailing types of fishing and boat names. Selection will be made by the Committee on Awards in consultation with officials of the Company.

THE GEORGE F. PENSOM BURSARY FUND — This fund provides bursaries of varying amounts for worthy and deserving students entering the University of Victoria from secondary schools, with preference being given to students from School District #47. Selection will be made by the Senate Committee on Awards on the basis of financial need and recommendations from the Secondary Schools.

* THE WILF SADLER MEMORIAL BURSARY FUND — A bursary of five hundred dollars ($500) will be allocated annually to a needy student from the Greater Victoria area who is entering the university from the secondary school system. Preference will be given to students who can demonstrate significant involvement in amateur sports. Selection will be made by the Senate Committee on Awards in consultation with representatives from local secondary schools.

B. ENTRANCE BURSARIES ADMINISTERED BY THE UNIVERSITY OF BRITISH COLUMBIA

Application forms for the following bursaries may be obtained from the Office of Awards and Financial Aid, the University of British Columbia, Room 101, 2075 Wesbrook Mall, Vancouver, B.C. V6T 1W5, and must be returned by April 15, unless otherwise indicated. Since some changes may have been made after this calendar went to press, you are urged to refer to the U.B.C. Calendar.

FLETCHER CHALLENGE CANADA LIMITED BURSARIES — Bursaries to a total of $10,300, each with a maximum value of $1,200, are offered by Fletcher Challenge Canada Limited to qualified legal dependents of employees who, by June 30 of the year in which the award is made, have or will have served with the Company for at least one

year. The awards are open to students beginning or continuing studies in the fall in a full undergraduate program of studies at the University of British Columbia, the University of Victoria or Simon Fraser University. Winners of the company's Entrance Scholarships will not be permitted to simultaneously hold a Fletcher Challenge Canada Limited Bursary. Applications must contain the necessary details of family service with the company.

RETAIL, WHOLESALE AND DEPARTMENT STORE UNION, LOCAL 470 BURSARY — One bursary of $250 is offered by the Retail, Wholesale and Department Store Union, Local 470 to active members, or sons, daughters and legal wards of active members of the Union in good standing. It is open in competition to applicants who are proceeding from Grade I to begin studies at the University of British Columbia, the University of Victoria, or Simon Fraser University, or to a regional college, in a full program leading to a degree in any field, or leading to a Diploma in technology at the British Columbia Institute of Technology. To be eligible for consideration a candidate must have a satisfactory academic standing (normally an overall average of at least 65% in Grade I). In the selection of the winner, the basic factors will be the financial need of the candidates and their families. The winner will be selected in consultation with the Union.

THE RETAIL, WHOLESALE AND DEPARTMENT STORE UNION, LOCAL 580 BURSARY — A bursary of $500 is offered by the Retail, Wholesale and Department Store Union, Local 580 to active members, sons, daughters and legal wards of active members of the Union in good standing. It is open in competition to applicants who are proceeding from Grade I to studies at the University of British Columbia, the University of Victoria or Simon Fraser University in a full program leading to a degree in any field. To be eligible for consideration a candidate must have satisfactory standing (normally an overall average of 65% in Grade I). In the selection of the winner, the basic factor will be the financial need of the candidates and their families. The winner will be selected in consultation with the Union.

RETAIL, WHOLESALE UNION, LOCAL 580 — Stan Colbert Bursary — A bursary of $500 is offered by the Retail Wholesale Union Local 580 to active members, or sons, daughters and legal wards of active members of the Union in good standing. It is open in competition to applicants who are proceeding from Grade I to studies at the University of British Columbia, the University of Victoria, the B.C. Institute of Technology, or Simon Fraser University, or to a regional college in a full program leading to a degree or equivalent in any field. To be eligible for consideration a candidate must have satisfactory academic standing (normally an overall average of at least 65% in Grade I). In the selection of the winner, the basic factor will be the financial need of the candidates and their families. The winner will be selected in consultation with the Union.

VAN-TEL CREDIT UNION BURSARIES

(a) The Leo Morris Memorial Bursary:

To honour the memory of Leo Morris, late treasurer of Van-Tel Credit Union, a bursary of $500 will be awarded to the sons, daughters and legal dependents residing in British Columbia, of members of Van-Tel Credit Union. It is open to competition to students proceeding from Grade I into a full program of studies at the University of British Columbia, University of Victoria, Simon Fraser University, or any accredited postsecondary Institute within the Province of British Columbia. The winner will be selected by the University of British Columbia in consultation with Van-Tel Credit Union. From those who so qualify, in the final selection, a major factor will be the financial circumstances of the applicants and their families. Applications and further information may be obtained from the Awards Office at the University of British Columbia, Vancouver, B.C. V6T 1W5. Applications must be received by U.B.C. on or before May 15.

(b) The Les King Memorial Bursary:

To honour the memory of Les King, late President of Van-Tel Credit Union, a bursary of $500 will be awarded to the sons, daughters and legal dependents residing in British Columbia, of members of Van-Tel Credit Union. It is open to competition to students proceeding from Grade I into a full program of studies at the University of British Columbia, University of Victoria, Simon Fraser University, or any accredited postsecondary Institute within the Province of British Columbia. The winner will be selected by the University of British Columbia in consultation with Van-Tel Credit Union. From those who so qualify, in the final selection, a major factor will be the financial circumstances of the applicants and their families. Applications and further information may be obtained from the Awards Office at the University of British Columbia, Vancouver, B.C. V6T 1W5. Applications must be received by U.B.C. on or before May 15.

WHITE SPOT LIMITED BURSARY — One bursary, having a total value of $1,200, is provided by White Spot Limited and its subsidiary companies for their employees, and sons and daughters of their employees who have served the firm for at least two years. The bursary is paid in annual amounts of $300 each and is open in competition to eligible students proceeding from Grade I of secondary school to a full program of studies at the University of British Columbia, the University of Victoria or Simon Fraser University. For purposes of qualification "employees" shall include students having part time employment with the Company while attending secondary school, and who are still employed. The decision as to qualification by employment shall rest with the Company. In all other matters, winners will be selected by the Office of Awards and Financial Aid of the University of British Columbia on the basis of academic standing and need for financial assistance. To be eligible, a candidate must have clear standing in the year's work most recently taken with an overall average of at least 65%. Winners will be considered for renewals of the bursary for their second, third and fourth years of University attendance (up to graduation). Renewals each year, however, are not automatic and will be made only to those who file a new application, pass all subjects with a minimum overall average of 65%, need financial assistance, and who still qualify as employees of, or dependents of employees, at White Spot.

C. ENTRANCE AWARDS ADMINISTERED BY OTHER INSTITUTIONS AND ORGANIZATIONS

THE EDWARD JAMES ASHMORE MEMORIAL BURSARY — A bursary in the amount of $1,000 is offered annually by the Hospital Employees' Union Local 180, in memory of the late Brother E.J. Ashmore who was 2nd Vice-President of the Union's Provincial Executive Committee. The bursary will be offered to students who are proceeding in the fall from Grade I to a full program of studies at the University of British Columbia, the University of Victoria, Simon Fraser University, or any regional college in British Columbia, in any field leading to a degree, or leading to a diploma in technology at the British Columbia Institute of Technology. To be eligible an applicant must be the son/daughter of an active member of the Union ("active" being interpreted as on staff of a hospital within the jurisdiction of Local 180, or on the staff as of January 1 of the year of the award but since superannuated). The information given in the application form must clearly establish the applicant's connection with Local 180. The bursary will be awarded to the candidate who, in the opinion of the University (in consultation with the Union) is best qualified in terms of financial need. Applications and information may be obtained from Hospital Employees' Union, Local 180, 2286 West 12th Avenue, Vancouver, B.C. V6K 2N5.

THE BOBBY BAUER MEMORIAL AWARD — The Bobby Bauer Memorial Foundation makes one or more awards annually to students demonstrating outstanding proficiency in hockey who qualify for admission to a full time undergraduate course at a Canadian university. Application should be made prior to August 31 on forms provided by the Foundation. A letter of reference from a person actively involved in hockey must accompany each application. Inquiries and each application should be sent directly to: Bobby Bauer Memorial Foundation, 60 Victoria Street North, Kitchener, Ontario.

B.C. ASSOCIATION OF SOCIAL WORKERS, NORTHERN BRANCH, BURSARY — This $500 bursary is available for a student who is:

1) accepted for study in a recognized School of Social Work and enrolled in a program leading to a B.S.W. or M.S.W. degree,
2) a resident of the Northern Branch B.C.A.S.W. area (essentially regions 5, 7 and 8 of the Ministry of Human Resources),
3) has a need of financial assistance.

Application must be made by June 30 to Mr. Verne Dallamore, Chairperson, Bursary and Grants Committee, Northern Branch, B.C.A.S.W., P.O. Box 271, Prince George, B.C. V2L 4S2.

CAL CALLAHAN MEMORIAL BURSARY — The Pipe Line Contractors Association of Canada offers a bursary, or bursaries, to the total

of $1,000 per annum, to be awarded annually, to sons, daughters or legal wards of persons who derive their principal income from the Pipeline Industry and whose employers are members of the Association. The purpose of these bursaries is to give the financial assistance to students who are beginning undergraduate studies in a full program leading to a degree or certificate in any field, at a recognized University or College in Canada. Selection will be made by the Executive Committee of the Association from applicants, based upon scholastic record and financial need, provided that they otherwise qualify. Applications may be obtained from the Association's Executive Office, Suite 720, 5915 Airport Rd., Mississauga, Ontario, L4V 1T1 and must be returned by not later than September 30, accompanied by a receipt or other proof of enrollment.

THE KIT DAVISON BURSARY ENDOWMENT FUND — Administered by the Muscular Dystrophy Association of Canada, B.C. Region. This bursary has been established to honour Mrs. Davison. It is intended for students with muscular dystrophy who wish to continue their studies at any B.C. postsecondary institution. Criteria: Candidates must be registered with the Association, have completed Grade 12, and be a resident of B.C. Amount: $500. Deadline for applications is August 1. Address: Suite 123, 1600 West 6th Avenue, Vancouver, B.C. V6J 1R3.

THE HOSPITAL EMPLOYEES' UNION (PROVINCIAL EXECUTIVE) BURSARIES — A bursary in the amount of $500 is offered by the Hospital Employees' Union Local 180 to students who are proceeding in the fall from Grade I to a full program at the University of British Columbia, University of Victoria, Simon Fraser University, or any of the regional colleges in British Columbia, in any field leading to a degree, or leading to a diploma in technology at the B.C. Institute of Technology. To be eligible an applicant must be the son or daughter of an active member of the Union ("active" being interpreted as on the staff of a hospital within the jurisdiction of Local 180, or on the staff as of January 1 of the year of award but since superannuated). The information given in the form must clearly establish the applicant's connection with Local 180. Present members of the Hospital Employees Union who have had one (1) year of continuous service shall, as well as their children and spouses, be elegible for Bursaries. Bursaries shall be attainable at any postsecondary education institute. Applications and information may be obtained from Hospital Employees' Union, Loc. 180, #800, 1111 West Georgia St., Vancouver, B.C. V6E 3G7.

THE HOSPITAL EMPLOYEES' UNION (ROYAL JUBILEE UNIT) BURSARY — A bursary in the amount of $350 is offered by the Royal Jubilee Unit, Victoria, of the Hospital Employees' Union, Local 180. The award is available to students who are proceeding in the fall from Grade I to a full program at the University of British Columbia, the University of Victoria, Simon Fraser University or any of the regional colleges in British Columbia, in any field leading to a degree, or leading to a diploma of technology at the British Columbia Institute of Technology. To be eligible, an applicant must be the son or daughter of an active member of the Union ("active" being interpreted as on the staff of a hospital within the jurisdiction of Local 180, or on the staff as of January 1st of the year of award but since superannuated). The information given on the application must clearly establish the applicant's connection with Local 180. Present members of the Hospital Employees Union who have had one (1) year of continuous service shall, as well as their children and spouses, be eligible for Bursaries. Bursaries shall be attainable at any postsecondary educational institute. Applications and information may be obtained from Hospital Employees' Union, Loc. 180, #800, 1111 West Georgia St., Vancouver, B.C. V6E 3G7.

THE HOSPITAL EMPLOYEES' UNION (VANCOUVER GENERAL UNIT) BURSARIES — two bursaries of $350 each are offered annually by the Vancouver General Unit of the Hospital Employees' Union Local 180 to students who are proceeding in the fall from Grade I to a full program at the University of British Columbia, University of Victoria, Simon Fraser University, or any of the regional colleges in British Columbia, in any field leading to a degree, or leading to a diploma in technology at the B.C. Institute of Technology. To be eligible an applicant must be the son or daughter of an active member of the Union ("active" being interpreted as on the staff of a hospital within the jurisdiction of Local 180, or on the staff as of January 1 of the year of award but since superannuated). The information given in the form must clearly establish the applicant's connection with Local 180. Present members of the Hospital Employees Union who have had one (1) year of continuous service shall, as well as their children and spouses, be eligible for Bursaries. Bursaries shall be attainable at any postsecondary educational institute. Applications and information may be obtained from Hospital Employees' Union, Loc. 180, #800, 1111 West Georgia St., Vancouver, B.C. V6E 3G7.

THE HOSPITAL EMPLOYEES' UNION (VICTORIA GENERAL UNIT) BURSARY — A bursary of $350 is offered by the Victoria General Unit of the Hospital Employees' Union Local 180 to students who are proceeding in the fall from Grade I to a full program at the University of British Columbia, University of Victoria, Simon Fraser University, or any of the regional colleges in British Columbia, in any field leading to a degree, or leading to a diploma in technology at the B.C. Institute of Technology. To be eligible an applicant must be the son or daughter of an active member of the Union ("active" being interpreted as on the staff of a hospital within the jurisdiction of Local 180, or on the staff as of January 1 of the year of award but since superannuated). The information given in the form must clearly establish the applicant's connection with Local 180. Present members of the Hospital Employees Union who have had one (1) year of continuous service shall, as well as their children and spouses, be eligible for Bursaries. Bursaries shall be attainable at any postsecondary educational institute. Applications and information may be obtained from Hospital Employees' Union, Loc. 180, #800, 1111 West Georgia St., Vancouver, B.C. V6E 3G7.

THE LISA HUUS MEMORIAL FUND — A bursary in the amount of not less than $1500 will be awarded annually to assist a severely disabled student to undertake or continue his or her postsecondary education at the University of Victoria. Applicants will be considered to have a severe disability provided there are two or more organ systems affected, e.g., muscular system or nervous system. Severe disabilities affecting only one organ system, but satisfying other criteria may be considered under special circumstances. Applications are obtainable from the Financial Aid Office, University of Victoria, or, The G.R. Pearkes Centre for Children, 3970 Haro Road, Victoria, British Columbia, V8N 4A9, and must be submitted not later than May 31.

THE I.W.A. LOCAL 1-80 BURSARY — The International Woodworkers of American Local 1-80 offers a bursary in the amount of $1,000 in open competition to all I.W.A. Local 1-80 members or a wife, son, or daughter of an I.W.A. Local 1-80 member, or to a person who is wholly supported by a member in good standing of Local 1-80. For the purpose of eligibility in applying for a bursary, the wife, son, or daughter of a deceased I.W.A. Local 1-80 member in good standing at the time of decease, or a member who is retired and was a member of good standing of Local 1-80 at the time of retirement, shall also be eligible. In making the award, the bursary committee will be guided by the following: the average marks obtained by the Grade I student during the school term; indication of need; all applicants must be in the university program proceeding to any degree granting university, the B.C. Institute of Technology, or other accredited vocational or technical school to complete a course leading to establishing a career. All those desiring to compete must notify the Financial Secretary of I.W.A. Local 1-80, 351 Brae Road, Duncan, B.C. by a letter not later than June 21. The I.W.A. Local 1-80 reserves the right to withhold the bursary if no candidate makes sufficiently high standing.

ROYAL CANADIAN LEGION (PACIFIC COMMAND) BURSARIES — The Legion (Pacific Command), offers annually a number of awards for students proceeding from high school to university, and some awards to students entering second, third and fourth year. These bursaries are awarded on the basis of academic standing, financial need and participation and achievement in student and community affairs. Preference is given to sons and daughters of deceased, disabled or other veterans, but applications from other worthy students are also considered. The deadline date for applications is May 31. Further information may be obtained from Royal Canadian Legion, 3026 Arbutus Street, Vancouver, B.C. V6J 3Z2.

SECTION 3

UNDERGRADUATE BURSARIES FOR WHICH NO APPLICATION IS NECESSARY

The bursaries listed in this section are open only to students who attended the University of Victoria in the regular Winter Session specified in this Calendar. They are awarded automatically and applications from students are not required. Students in specific disciplines may wish to discuss their potential eligibility with representatives from the Faculty, School or Department.

General Bursaries

* THE WILLIAM AND AUDREY ADAMS BURSARY FUND — One or more bursaries will be awarded annually to students who have demonstrated strong involvement in extracurricular activities. The recipient must be a Canadian citizen. Selection will be made by the Senate Committee on Awards.

* SUTRO BANCROFT BURSARY — A bursary of six hundred dollars ($600) will be awarded by the Senate Committee on Awards to a deserving and promising student continuing studies at the University of Victoria.

BETA SIGMA PHI SORORITY ELIZABETH FORBES BURSARY — An award of two hundred dollars ($200) to be awarded annually to a promising and deserving woman entering third or fourth year Arts and Science or Education at the University of Victoria.

THE BRITISH COLUMBIA TELEPHONE COMPANY BURSARY — A bursary valued at seven hundred and fifty dollars ($750) will be awarded to a student in any undergraduate discipline who has completed first year, and is proceeding directly to second year, at the University of Victoria. Selection will be made by the Senate Committee on Awards on the basis of financial need and reasonable academic achievement.

* THE NELS GRANEWALL BURSARY FUND — One or more awards are made to students in any undergraduate discipline entering their graduating year who demonstrate a need for financial assistance. Preference will be given to students with family responsibilities whose permanent residence is outside of Greater Victoria. The Awards are made available through the donation of the 1984 Graduating Class to commemorate the twenty-First Birthday of the University of Victoria.

* SUE MACDONALD MEMORIAL BURSARY FUND — One or more awards are available annually on the basis of financial need.

* ALEC McNAB AND NEVILLE MUNSON EMERGENCY FUND — One or more awards are available annually on the basis of financial need.

* DONNA NICKEL MEMORIAL BURSARY — To honour the memory of Mrs. Donna J. Nickel of Penticton, a bursary of $TBA will be awarded to a student continuing studies at the University of Victoria. Selection will be made by the Senate Committee on Awards with preference to B.C. residents.

THE UNIVERSITY OF VICTORIA FACULTY BURSARIES — approximately 25 bursaries of $500 are awarded annually on the basis of financial need and reasonable academic standing. The fund for these awards was established by donations of University of Victoria faculty members and professional librarians. Selection of the recipients will be made by the Student Financial Aid Services Office.

* FORREST L. SHAW EMERGENCY FUND — One or more awards are available annually on the basis of financial need.

* B & B SIVERTZ BURSARY — two bursaries valued at $800 each have been endowed by Mr. and Mrs. B.G. Sivertz of Victoria, B.C. The awards will be made by the Senate Committee on Awards to students demonstrating financial need.

* THE JAMES ELLISON CAMPBELL TAYLOR BURSARY FUND — Several bursaries of $TBA are to be awarded annually to students registered at the University of Victoria. Selection of the recipients will be made by the Senate Committee on Awards.

* THE VICTORIA COLLEGE CRAIGDARROCH CASTLE ALUMNI ASSOCIATION BURSARY — A bursary of $500 will be awarded annually to a needy student who has completed first year in the Faculty of Arts and Science at the University of Victoria and who is continuing in that faculty. The student must be a resident of British Columbia. Selection will be made by the Senate Committee on Awards.

* THE WEBER MEMORIAL BURSARY — two hundred and seventy-five dollars ($275) to be awarded annually in memory of Mr. and Mrs. E. Weber, to the most deserving student in the third year. Academic standing, citizenship and need are all to be taken into consideration.

Undergraduate Awards Listed by Course or Area of Study

Biochemistry

* THE DR. ERNST VON RUDLOFF BURSARY IN BIOCHEMISTRY — An award of $800 is made annually to a student beginning year 3 or 4 of a major or honours program in Biochemistry. The award is open to all students in this program, especially those interested in plant biochemistry. The award will be based on academic standing and financial need. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Department of Biochemistry and Microbiology.

* THE ADA AND ROBERT LE GRYS MEMORIAL BURSARY IN BIOCHEMISTRY AND/OR MICROBIOLOGY — A bursary of $400 is awarded annually, on the basis of financial need and academic performance, to a student participating in a major or honours program in Biochemistry and/or Microbiology which bears on human conditions — with special emphasis on human nutritional requirements and related subjects. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Department of Biochemistry and Microbiology.

* THE HUGH AND LILIAN SALMOND BURSARIES IN BIOCHEMISTRY AND/OR MICROBIOLOGY — two awards of $750 each are made annually, on the basis of financial need and academic performance, to students participating in major or honours programs in biochemistry and/or microbiology which bear on human conditions (1) such as respiratory diseases ... particularly asthma, bronchial asthma, etc., and (2) with special emphasis on the body's immune system and allergic reactions. Selection of the recipients will be made by the Senate Committee on Awards upon the recommendation of the Department of Biochemistry and Microbiology.

Biology

* F.W. BENTON MEMORIAL BURSARY — An award of $TBA will be made to a 4th year or graduate student in the biological sciences with a special interest in salmonids or marine environmental studies and who is studying or doing research at the Bamfield Marine Station. This bursary is given to assist in the continuance of F.W. Benton's work in wilderness preservation. Selection will be made by the Senate Committee on Awards upon the recommendation of the Department of Biology in consultation with the Executive Director of the Bamfield Marine Station.

* THE HOWARD ENGLISH VICTORIA FISH AND GAME BURSARY — The Victoria Fish and Game Protective Association will present a bursary in the amount of five hundred dollars ($500) annually to a student entering fourth year in Biological Sciences and who shows demonstrated interest in conservation, especially as applied to aquatic ecology (biology). If funds permit a second award will be given. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Department of Biology.

* THE GERALD G. FEW BURSARIES IN FOREST-BIOLOGY — two awards of up to $800 each will be made to needy students in the biological sciences with a commitment to the field of Forest Biology. Selection to be made by the Senate Awards Committee upon the recommendation of the Forest Biology Program Committee.

* THE G. MORLEY NEAL MEMORIAL BURSARY — An award of at least $1,000 is made annually to a student entering year 4 of a biology honours or major program, who has a good academic standing and is in financial need. Selection will be made by the Senate Committee on Awards upon the recommendation of the Department of Biology.

THE SAMUEL SIMCO BURSARIES — two Samuel Simco Bursaries of five hundred dollars ($500) each, established by the Victoria Natural History Society out of funds bequeathed for this purpose by the late Mr. Samuel Simco, will be awarded annually by the Society to students

*Administered by the University of Victoria Foundation.

entering the third and fourth year of any undergraduate program in the field of Natural History or any year of a graduate program in the same area of study, who have good academic standing and are in financial need. If the circumstances warrant, the recipient may receive an award for two successive years. Selection will be made by the Senate Committee on Awards on the recommendation of the Department of Biology.

Child and Youth Care

* THE WINNIFRED M. CLARK BURSARY — A bursary established by the Capital Region Association for the Mentally Handicapped will be awarded annually to a needy student entering the fourth year of the Child Care program specializing in the study of mental retardation. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the School of Child and Youth Care.

Creative Writing

* THE PATTI BARKER BURSARY IN CREATIVE WRITING — A bursary is awarded annually to a student in a first or second year Creative Writing course. Selection will be made by the Senate Committee on Awards upon the recommendation of the Department of Creative Writing.

* THE CYRIL AND FRANCES GAGNON BURSARY — A bursary of up to $400 will be awarded annually to a needy 3rd or 4th year student in the Department of Creative Writing who was born in British Columbia and is or was a resident of a rural area of British Columbia. Selection of the recipient will be made by the Senate Committee on Awards upon recommendation of the Department of Creative Writing.

Economics

B.P. CANADA BURSARY — An award of one thousand dollars ($1000) is offered annually to a student continuing studies at the University of Victoria in either Economics or Engineering. Selection will be made by the Senate Committee on Awards upon the recommendation of the Faculty of Engineering and the Department of Economics.

THE SOHAN JAWL BURSARY — A bursary of $1,000 is awarded to a student continuing studies at the University of Victoria, and intending to pursue a degree in either Commerce or Business and Administrative Studies. Selection will be made by the Senate Committee on Awards upon the recommendation of the Department of Economics.

Education

* THE G. CLIFFORD CARL MEMORIAL BURSARY — Six hundred dollars ($600) awarded to a deserving student entering third, fourth, or fifth year or in the undergraduate certification program in the Faculty of Education and specializing in Biological Sciences or Outdoor Education. Selection will be made by the Senate Committee on Awards upon the recommendation of the Scholarship Comittee of the Faculty of Education.

* THE CLEARIHUE BURSARY — Eight hundred and fifty dollars ($850) awarded annually to a promising and deserving student in the Faculty of Education, who shows promise and who has at least a good second class average.

* THE FOX MEMORIAL BURSARY — An award of at least $750 will be made to a deserving student entering third, fourth, or fifth year in the Elementary Curriculum of the Faculty of Education, who has at least a good second class average. If funds permit, a second award will be given. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Faculty of Education.

* THE MADGE HOGARTH BURSARY FUND — One or more bursaries totalling approximately $1,000 are awarded annually to students entering the Professional Year, including the Post Degree Professional program, in the Faculty of Education. Selection of the recipients will be made by the Senate Committee on Awards upon the recommendation of the Faculty of Education.

* THE JAMES WILSON HORNE MEMORIAL BURSARY FUND — Awards of at least $800 will be made to students who have received undergraduate degrees from the University of Victoria and are continuing studies in the Post Degree Professional Programs in the Faculty of Education. The recipients must demonstrate outstanding interest in education and financial need. Selection of the recipients will be made by the Senate Committee on Awards upon the recommendation of the Faculty of Education.

* THE GODFREY LAWRENCE STEVENS LEE PHYSICAL EDUCATION BURSARY — An award of $400 is made annually to a deserving School of Physical Education student proceeding to year 2, 3 or 4 of the B.Sc. program with a major in Human Performance. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Faculty of Education.

* THE CORALIE L. LOMAS MEMORIAL CANADIAN ASSOCIATION FOR HEALTH, PHYSICAL EDUCATION AND RECREATION BURSARY — Three hundred and seventy-five dollars ($375) is awarded annually to a student who has completed first year and is proceeding toward a B.Ed. degree with a teaching area in Physical Education. Applicants should demonstrate a need for assistance, and show evidence of a particular interest and aptitude in Physical Education plus general proficiency in academic work. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Greater Victoria Branch of C.A.H.P.E.R.

* THE NATIVE DAUGHTERS OF BRITISH COLUMBIA BURSARY — Three hundred dollars ($300) is awarded annually to a deserving British Columbia native Indian student completing year 2, 3 or 4 in the Faculty of Education. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Faculty of Education.

* THE GUNNER SHAW MEMORIAL BURSARY — An award of $600 is made annually on the basis of financial need and academic performance to a Vancouver Island resident entering year one of the Physical Education program. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Faculty of Education.

* THE TAYLOR EDUCATION BURSARIES — Annual awards will be made to fourth year students showing outstanding ability and interest in Education and needing financial assistance. If no qualifying students are enrolled in fourth year, the bursaries may be awarded the next year or be presented to qualified students of the fifth year, at the discretion of the Faculty of Education. The award commemorates the interest in Education by the Taylor family of Victoria.

* OLIVER C. WOLSEY BURSARY FUND — A bursary of $TBA will be awarded to a second or third year student in the Faculty of Education. Selection will be made by the Senate Committee on Awards upon the recommendation of the Faculty of Education.

Engineering

* ASSOCIATION OF PROFESSIONAL ENGINEERS OF BRITISH COLUMBIA (VICTORIA BRANCH) BURSARY — Bursaries of varying amounts will be awarded annually to students entering the second year of Engineering at the University of Victoria. The assessment of academic standing will be based upon performance during the first year of Engineering at a British Columbia university or community college. The recipient will be selected by the Senate Committee on Awards upon the recommendation of the Faculty of Engineering.

B.P. CANADA BURSARY — An award of one thousand dollars ($1000) is offered annually to a student continuing studies at the University of Victoria in either Economics or Engineering. Selection will be made by the Senate Committee on Awards upon the recommendation of the Faculty of Engineering and the Department of Economics.

* THE ALLAN AND ELIZABETH McKINNON BURSARY IN ENGINEERING — An award of $1,200 is made annually, on the basis of financial need and academic performance, to a student entering or continuing studies in the Faculty of Engineering. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Faculty of Engineering.

* HUGH AND LILIAN SALMOND BURSARIES — two awards of $750 each are made annually, on the basis of financial need and academic performance, to students in the Faculty of Engineering. Selection of the two recipients will be made by the Senate Committee on Awards upon the recommendation of the Faculty of Engineering.

English

* THE IRENE LEE BURSARY IN ENGLISH — An award of $400 is made annually to a deserving student proceeding to year 3 or 4 of an Honours or Major program in the Department of English. Selection of

*Administered by the University of Victoria Foundation.

the recipient will be made by the Senate Committee on Awards upon the recommendation of the Department of English.

French

* THE MAJOR KEITH W.A. MACDOUGALL MEMORIAL BURSARY — A bursary of $250 will be awarded annually to a deserving undergraduate student in need of assistance who is majoring in French and who is interested in continuing studies in the field. Selection will be made by the Senate Committee on Awards upon the recommendation of the Department of French Language and Literature.

Geography

THE VICTORIA LAPIDARY AND MINERAL SOCIETY BURSARY — An annual bursary of $500 will be awarded to a deserving student with a strong academic record who has completed the introductory course in Geology and who intends to continue studies in this field. The Selection will be made by the Senate Committee on Awards upon the recommendation of the Department of Geography.

Health Information Science

* BARBARA THORNTON MEMORIAL BURSARY FUND — A bursary of $TBA is awarded annually to a student entering the first year in the Health Information Science program. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the School of Health Information Science.

VICTORIA MEDICAL SOCIETY BURSARY — An award of $750 is made annually to an outstanding student in financial need, who is proceeding to year 3 or 4 of the Health Information Science program. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the School of Health Information Science.

History

* CANADIAN DAUGHTERS' LEAGUE, ASSEMBLY NO. 5 — GERTRUDE M. RALSTON MEMORIAL BURSARY — two hundred and fifty ($250) awarded to a deserving student, preferably one in Canadian history.

Italian

THE ITALIAN ASSISTANCE CENTRE BURSARY — two hundred and fifty dollars ($250) to be granted annually to two needy students who have shown proficiency in the Italian language and who will be returning to the University of Victoria for further studies in Italian. Selection will be made by the Senate Committee on Awards upon the recommendation of the Department of Hispanic and Italian Studies.

Law

* THE NANCY JOHNSON MEMORIAL BURSARY — A bursary of $200 will be awarded annually to a student in the Faculty of Law who has encouraged and supported fellow students and demonstrated academic achievement, determination and hard work, and who is in need of financial assistance. The recipient will be selected by the Senate Committee on Awards upon the recommendation of the Faculty of Law.

* CARIBOO BAR ASSOCIATION BURSARY — One or more bursaries totalling $1200 will be awarded annually to a student in the Faculty of Law who has demonstrated good academic standing and financial need. Preference will be given to a student from the area of the Province of British Columbia served by the Cariboo Bar Association. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Faculty of Law.

THE CONSTABLE IAN D. JORDAN BURSARY FUND — An annual bursary or bursaries in the amount of $2000 or more has been established to assist deserving students in the Faculty of Law. The award is designed to aid students who have family responsibilities, who need financial help to further their education, and who have an interest in criminal law. The bursary was established to honour the contributions to the Law School and to law enforcement of Ian Jordan, a 1984 UVic graduate, seriously injured in 1987 while on duty with the Victoria City Police. Selection of the recipients will be made by the Senate Committee on Awards upon the recommendation of the Faculty of Law.

* THE LIFE UNDERWRITERS ASSOCIATION OF CANADA EDUCATIONAL FOUNDATION BURSARY IN LAW — A bursary of $175 is awarded annually to a student in the Faculty of Law who demonstrates financial need. The recipient will be chosen by the Senate Committee on Awards on the recommendation of the Faculty of Law.

THE MICKEY MORAN MEMORIAL BURSARY — A bursary of $350 is awarded annually on the basis of financial need and the student's contribution to and achievement in courses related to litigation and criminal law. The award, sponsored by the Kootenay Bar Association, honours the late Mickey Moran, Q.C. for his achievements in the practice of criminal law. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Faculty of Law.

THE NURSE-LAWYERS' ASSOCIATION OF BRITISH COLUMBIA BURSARY — A bursary of $500, or such higher value as the donor may determine, will be awarded annually to a student in the second or third year of the LL.B. program. Preference will be given, in the first instance, to a student with a background of advanced nursing education and who is a member of, or eligible for membership in, the Nurse-Lawyers' Association of British Columbia. If such a candidate is not available, preference will be given to a student who is a single parent, in financial need and with a good academic record in the LL.B. program. Selection of the recipient will be made by the Senate Committee on Awards on the recommendation of the Financial Aid Committee of the Faculty of Law.

* THE JEAN MARIE SHERWIN BURSARY IN LAW — A bursary of $500 is awarded to a student in the first or second year of the Law program who has demonstrated superior ability, enthusiasm and aptitude in the study of Law and is in need of financial assistance to continue his studies. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Faculty of Law.

* THE HUGH STEPHEN BURSARIES — two bursaries of $600 each, established by Mr. Hugh Stephen, are awarded annually to students in the Faculty of Law who need financial assistance to complete their legal studies. An applicant's contribution to the activities of the Faculty and academic record may be considered when applications for the bursary are evaluated. The selection of the recipients of the bursary will be made by the Senate Committee on Awards upon the recommendation of the Faculty of Law.

* THE CHIEF MICHAEL A. UNDERWOOD MEMORIAL BURSARY — A bursary of $500 has been made available to assist native students to continue their studies in the Faculty of Law. The bursary is available to full or part time students who are in financial need and have successfully completed at least the first term of study in the LL.B. program. One or more students in a given year may share the bursary. Selection of the recipient(s) will be made by the Dean or the Dean's nominee, acting upon the recommendation of the Faculty of Law's Financial Aid committee, or its successor.

* THE JOHN WIGHT MEMORIAL BURSARY — A bursary of $400 is awarded annually by the Faculty of Law to a student who has completed the first year of the LL.B. program and who, in addition to a record of academic merit in the faculty, is deemed to be a worthy recipient in need of financial assistance. The recipient will be selected by the Senate Committee on Awards upon the recommendation of the Faculty of Law.

Music

* THE ST. JUDE BURSARY — One or more awards are made annually to student(s) pursuing a Bachelor of Music degree with a performance major in voice. The student(s) must demonstrate financial need and display vocal and academic excellence. The recipients may be newly admitted or returning students. Selection will be made by the Senate Committee on Awards upon the recommendation of the School of Music's Performance faculty.

* THE GEORGE JENNINGS BURNETT MEMORIAL BURSARY — An award of $900 is made annually to a student specializing in organ or composition in a Bachelor of Music program. Preference will be given to a student who needs financial assistance to continue in the program. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the School of Music.

* THE BERNARD NAYLOR MEMORIAL BURSARY IN MUSIC — Up to $400 is awarded annually to a student in the School of Music who shows evidence of outstanding performance in the University Chorus. Selection of the recipient will be made by the Senate Committee on Awards on the recommendation of the School of Music.

*Administered by the University of Victoria Foundation.

THE NORVAL SCHROEDER BURSARY — A bursary of $1200, or such higher value as the donor may determine, will be awarded annually to a deserving student of an orchestral instrument in any year of the Bachelor of Music program. The recipient will be chosen by the Senate Committee on Awards upon the recommendation of the School of Music.

Nursing

BRITISH COLUMBIA LUNG ASSOCIATION — CHRISTMAS SEAL SOCIETY BURSARY — A bursary of five hundred dollars ($500) will be awarded annually by the British Columbia Lung Association-Christmas Seal Society to a needy student entering the final year in the Nursing Program. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the School of Nursing.

* THE LILY HARRIS MEMORIAL BURSARY — A bursary of $650 has been established in memory of Miss Harris who was a teacher of nursing in China for many years. If funds permit, a second award will be given. The award will be made annually to a needy female student in the School of Nursing. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the School of Nursing.

* THE STEVE PETERSON MEMORIAL BURSARY IN NURSING — A bursary of at least $1,000 will be awarded annually to a needy student in the School of Nursing, who has a strong academic record. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the School of Nursing.

* MAYO SINGH-JOGINDER KOUR MAYO SAROYA MEMORIAL BURSARY — A bursary of $250 will be awarded annually to a needy student in the School of Nursing. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the School of Nursing.

THE HAROLD AND MYRA THOMPSON MEMORIAL BURSARIES — two bursaries of $700 each will be awarded annually to needy students achieving an acceptable standing in Nursing 301 and 302, and demonstrating an interest in chronic and/or long term nursing. Selection will be made by the Senate Committee on Awards upon the recommendation of the School of Nursing.

Pacific and Asian Studies

THE CHINA EXCHANGE BURSARY — In order to encourage student exchanges between the University of Victoria and East China Normal University, a bursary of $500 will be awarded to a student from the University of Victoria attending the East China Normal University, or to a student from the East China Normal University attending the University of Victoria. Should unforeseen circumstances arise whereby no exchange is possible in a given year, the bursary may be awarded to a University of Victoria student who is enrolled in a program within the Department of Pacific and Asian Studies and who has demonstrated financial need, reasonable academic standing and an interest in the study of China. The recipient will be selected by the Senate Committee on Awards upon the recommendation of the Department of Pacific and Asian Studies.

Political Science

* THE SCOTT WALLACE BURSARY — A bursary of three hundred and fifty dollars ($350) will be awarded annually to a needy third year student majoring in Political Science who has demonstrated a sense of community responsibility and awareness of an obligation to serve society through active membership in various campus or community organizations. Although applications are not required for this bursary, students who consider themselves eligible for it are invited to communicate with the Chairman or Secretary of the Department. Selection will be made by the Senate Committee on Awards on the recommendation of the Department of Political Science.

Social Work

* THE ARTHUR C. ABRAHAMSON MEMORIAL BURSARIES — Two bursaries of $250 each will be awarded to students in the Distance Education Bachelor of Social Work Program. The intent of the bursaries is to assist students who encounter severe financial difficulties in returning to full or part time studies. The bursaries are awarded in memory of Arthur C. (Art) Abrahamson who, as a consultant to the School of Social Work in its early years, was a source of immense help to students and faculty. Selection will be made by the Senate Committee on Awards upon the recommendation of the School of Social Work.

THE JACK BARRACLOUGH BURSARY — This bursary has been established by the Sara Spencer Foundation to honour devoted volunteer service to the Victoria Community by Jack Barraclough. The bursary will be made annually to a student entering fourth year in the School of Social Work, who is in financial need and who has shown evidence of skillful and innovative social work practice in the third year practicum. If funds permit, a second award will be given. The selection will be made by the Senate Committee on Awards upon the recommendation of the School of Social Work.

* THE DIANNE BOURNE MEMORIAL BURSARY — A bursary is offered to a full or part time student admitted to the School of Social Work, who is in or is planning a career in child welfare practice in northern British Columbia. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the School of Social Work.

* THE JEAN MARIE SHERWIN BURSARY — A bursary of five hundred dollars ($500) is awarded to the student in the School of Social Work who has completed third year, is proceeding to fourth year and whose need for financial aid is such that the usual sources of assistance are not sufficient. Preference will be given to students with family responsibilities and whose permanent residence is outside Greater Victoria. Selection will be made by the Senate Committee on Awards upon the recommendation of the School of Social Work.

THE SARA SPENCER FOUNDATION BURSARIES — Four bursaries, each of $1450, will be awarded to third year students in the School of Social Work whose need for financial aid is such that the usual sources of assistance will not suffice. Preference will be given to students with family responsibilities and students whose permanent residency is outside Greater Victoria. Selection will be made by the Senate Committee on Awards in consultation with members of the School of Social Work.

Theatre

* THE FINLAYSON BURSARY — A bursary of $600, made available by Mr. Albert Winkel of Victoria, is offered to a second or third year student in the Department of Theatre who can show evidence of financial need and outstanding ability in the area of technical theatre and who is continuing his studies in the Department. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Department of Theatre.

* THE W.D. WEST ALUMNI BURSARY FUND — Bursaries from this fund are to be awarded annually to continuing students primarily according to need. Preference will be given to students specializing in Design. Recipients should have demonstrated promise, industry and a reasonable academic standard. The recipients and the amounts of the awards will be determined by the Senate Committee on Awards upon the recommendation of the Department of Theatre.

Visual Arts

* THE JOHN DOBEREINER MEMORIAL BURSARY — A bursary of at least $400 will be awarded annually to a worthy and needy undergraduate student who plans to pursue a career in Art. Selection will be made by the Senate Committee on Awards upon the recommendation of the Department of Visual Arts.

THE HELEN PITT FUND BURSARIES IN FINE ARTS — two or more bursaries will be awarded annually to third year students in the Department of Visual Arts, who demonstrate merit and financial need. Preference will be given to full time Visual Arts students from and in the Municipal District surrounding Vernon, B.C. Selection of the recipients will be made by the Senate Committee on Awards upon the recommendation of the Department of Visual Arts.

VICTORIA CENTRAL LIONS CLUB — MILLARD H. MOONEY FINE ARTS BURSARY — Five hundred dollars ($500) awarded annually to a worthy and talented student registered in the Department of Visual Arts in the Faculty of Fine Arts in first, second or third year on condition that the student return to the University of Victoria the following year.

*Administered by the University of Victoria Foundation.

SECTION 4

UNIVERSITY BURSARIES REQUIRING APPLICATION

A. UNDERGRADUATE BURSARIES FOR WHICH APPLICATION MUST BE MADE AT THE UNIVERSITY OF VICTORIA

The bursaries listed in this section are open only to students who attended the University of Victoria in the Winter Session specified in this calendar. Application for these bursaries must be made before April 30, unless otherwise indicated, on forms available from the Student Financial Aid Services Office, Second Floor, University Centre.

THE BETA SIGMA PHI BURSARY FUND — two bursaries each valued at $500 will be awarded to students continuing their studies at the University of Victoria. These awards are open only to Beta Sigma Phi International members in good standing or to their sons, daughters, grandsons and granddaughters. Selection of the recipients will be made by the Senate Committee on Awards on the basis of applications submitted to the Student Financial Aid Services Offices by October 30.

*THE BEVAN BURSARY — One or two bursaries totalling $800, will be awarded annually to a student(s) who is severely disabled by either deafness, blindness, or arthritis, or is otherwise seriously handicapped, and who is beginning or continuing studies at the University of Victoria. If no such student applies, the award may be given to any needy student. This bursary was established by Mrs. Ivy B. (Pat) Bevan in memory of her late husband, Albert S. (Bert) Bevan. Selection of the recipient(s) will be made by the Senate Committee on Awards upon the recommendation of the Student Financial Aid Services Office.

THE BIRKS FAMILY FOUNDATION — The Birks Family Foundation has established a plan of annual contributions to the Student Aid Fund of recognized Canadian Universities for the creation of the Birks Family Foundation Bursaries. The Bursaries are awarded by the Foundation on the recommendation of the University Scholarship Committee and are not restricted to the faculty or year and may be renewed. The number and amount of such awards may vary annually, depending upon the funds available for this purpose from the foundation.

B.C. TEACHERS CREDIT UNION BURSARY — A bursary of $400, a gift of the B.C. Teachers Credit Union, is offered at the University of Victoria. It will be open to sons and daughters of B.C. Teachers Credit Union members and to regular members. This award is available to a candidate in any year of the Faculty of Education. The award will be made on the basis of standing and need.

* THE GORDON CUTHBERT MEMORIAL BURSARY — A bursary of $100 will be awarded annually, in memory of James Gordon Cuthbert, who was a lifetime advocate of higher education. The award will be made to a student, on the basis of academic achievement and financial need, who has completed pre-medical studies at the University of Victoria and is proceeding to medical school the following September. Selection of the recipient will be made by the Senate Committee on Awards, after consultation with the family.

THE JOSEPH B. JACKSON BURSARY — A bursary of equivalent value to six fee units per calendar year, will be awarded annually to a single parent who is a mature student, undertaking part time studies at the University of Victoria in an undergraduate program. Renewal to a maximum of 30 fee units is dependent on the maintenance of an acceptable academic average. Some assistance with the purchase of books is also anticipated. The Bursary will be awarded to members of Holy Cross Parish, Gordon Head, Victoria, B.C. The individual must meet the criteria set by the University of Victoria for acceptance to the program of studies contemplated by the student.

It is possible the Bursary will not be awarded due to their being no applicants meeting the total criteria. In that event the criterion of membership in Holy Cross Parish may be waived and in its place the criterion of residency in Gordon Head at the time of application shall be substituted.

Applications for the Joseph B. Jackson Bursary may be made to Student Financial Aid Services at the University of Victoria or directly to Holy Cross Parish.

Selection will be made by the Senate Committee on Awards on the recommendation of a selection committee comprising two members of Holy Cross Parish, and, if possible, a member of the Parish who is also on the Faculty of the University.

THE DANIEL JACOB MEMORIAL BURSARY FUND — Through the generosity of the Alma Mater Society, a special fund has been established to commemorate Daniel Jacob, a student who died accidentally in November, 1981. The purpose of the fund is to assist financially students who may otherwise be forced to postpone or discontinue their academic career. All undergraduate students attending the University of Victoria who can demonstrate need may apply for assistance. If the circumstances warrant, bursaries may be granted for more than one year. Students may inquire about this fund at the Student Financial Aid Services Office and must arrange an interview with an officer.

* THE JUBILEE YEAR GRADUATING CLASS BURSARY FUND — A bursary valued at four hundred dollars ($400) will be awarded annually to a student enrolling in the graduating year and carrying a full course load. Students with an academic standing of second class or better will be considered if they demonstrate genuine need. The award is made available through the generous donations of graduating classes at the University. The 1978 Graduating Class has made a significant contribution to commemorate 75 years of higher education in Victoria.

THE CHARLES CHAN KENT GOLDEN WEDDING ANNIVERSARY BURSARY — A bursary of $500, the gift of The Charles Chan Kent Foundation, is offered to students who are proceeding to a degree in any field, having successfully completed at least one year at the University of Victoria and in need of financial assistance. The bursary will be awarded to a student of Chinese extraction.

* THE DR. DOUGLAS H. TAYLOR LEE MEMORIAL BURSARY — Five hundred and twenty-five dollars ($525) awarded annually to a second or third year student planning a career in medicine with overriding preference given to a female student with first class honours standing. Selection of the recipient will be made by the Senate Committee on Awards, and the applicant must be studying in the general area of the basic medical sciences, on a premedicine program.

PACIFIC COAST FISHERMEN'S MUTUAL MARINE INSURANCE COMPANY BURSARY — A bursary of six hundred dollars ($600) is offered by Pacific Coast Fishermen's Mutual Marine Insurance Company to sons, daughters and legal wards of past and present members of this Company. Applicants must apply on the University Scholarship Form. The application must be accompanied by a letter describing the family fishing history in general terms and detailing types of fishing and boat names. Selection will be made by the Committee on Awards in consultation with officials of the Company.

* THE STEVE PETERSON MEMORIAL BURSARY IN MEDICINE — A bursary of at least $400 will be awarded annually to a needy student following a Premedicine program at the University of Victoria, who has a strong academic record and has demonstrated interest in a career in medicine. Refer to page 30 of the UVic Calendar for information on Preprofessional programs. Selection of the recipient will be made by the Senate Committee on Awards.

THE VICTORIA MEDICAL SOCIETY BURSARY — One thousand dollars ($1000) to be awarded annually to a second year student of outstanding merit and promise, who has a high general academic standing and qualities of character indicating worthiness to hold the bursary. Selection of the student will be made by the Senate Committee on Awards, and preference will be given to a needy student studying in the general area of the basic medical sciences, on a premedicine program.

THE VICTORIA REAL ESTATE BOARD AWARDS — $1000 awarded annually as a scholarship and $1000 awarded annually as a bursary, to students registered at the University of Victoria who are dependents of members of the Victoria Real Estate Board. Students registered at the University of Victoria who find that they must transfer to another university in order to complete their chosen program are eligible to apply for these awards. Selection of the recipients will be made by the Senate Committee on Awards.

* THE CHRISTOPHER E. WILKS MEMORIAL BURSARY FUND — This fund was established by Mr. Harry Wilks in memory of his beloved son, Christopher, who died accidentally in December 1974. The purpose of the fund is to financially assist deserving students to pursue

*Administered by the University of Victoria Foundation.

an academic career who otherwise may be forced to postpone or discontinue their studies. All undergraduate students attending the University of Victoria who can demonstrate need may apply for assistance. Should circumstances arise where more students apply for assistance than available funds will cover, the decision as to which students will receive assistance will be governed by the areas of study, with preference given to studies in the Humanities. If their financial circumstances continue to warrant such assistance, bursaries may be granted to the same students in subsequent years while attending the University of Victoria. Every applicant must be interviewed by an officer of the Financial Aid Office.

* THE FRANK WING MEMORIAL BURSARIES — Awards will be given annually to students of Native Indian or oriental ancestry who demonstrate financial need. Students of other minorities will be considered (if there are no applicants from the two ancestral groups). The awards, donated by Caroline S. Chan, are available to students entering or continuing studies at the University of Victoria. Selection will be made by the Senate Committee on Awards. Band affiliation must be documented. Application must be made before September 30. Every applicant must be interviewed by an officer of the Financial Aid Office.

B. UNDERGRADUATE BURSARIES ADMINISTERED BY THE UNIVERSITY OF BRITISH COLUMBIA

Application forms for the following bursaries may be obtained in late March from the Office of Awards and Financial Aid, the University of British Columbia, Room 101, 2075 Wesbrook Mall, Vancouver, B.C. V6T 1W5, and must be returned by May 15, unless otherwise indicated. Students competing for bursaries on the basis of attendance at the University of Victoria must forward an official transcript of their academic record preferably accompanying the application. Since some changes may have been made after this calendar went to press, you are urged to refer to the U.B.C. Calendar.

FLETCHER CHALLENGE CANADA LIMITED BURSARIES — Bursaries to a total of $10,300, each with a maximum value of $1,200, are offered by Fletcher Challenge Canada Limited to qualified legal dependents of employees who, by June 30th of the year in which the award is made, have or will have served with the Company for at least one year. The awards are open to students beginning or continuing studies in the fall in a full undergraduate program of studies at the University of British Columbia, the University of Victoria or Simon Fraser University. Winners of the Company's Entrance Scholarships will not be permitted to simultaneously hold a Fletcher Challenge Canada Limited Bursary. Applications must contain the necessary detail of family service with the Company.

THE GLADYS LEDINGHAM AWARD — A cash award of $100, gift of the Victoria and District Parent-Teacher Council, is offered to students who are enrolled at the University of Victoria, the University of British Columbia or Simon Fraser University. It will be awarded to a student selected by the School of Librarianship, the University of British Columbia, who has been accepted for the Master of Library Science degree. The winner will be selected on the basis of need and scholastic ability.

THE VICTORIA HOME ECONOMICS AND DIETETIC ASSOCIATION BURSARY — This bursary of $325, the gift of the Victoria Home Economics and Dietetic Association, will be awarded annually to a woman student whose home is in Victoria or some centre on Vancouver Island, and who is entering the second, third or fourth year in the Department of Home Economics at the University of British Columbia. The award will be made on the basis of financial need to a student of good academic standing.

C. UNDERGRADUATE BURSARIES ADMINISTERED BY OTHERS

Application forms for the following bursaries are obtained by writing directly to the donor at the address provided in the terms of reference for the bursary. Deadlines for submitting completed application forms are also provided.

HUGH CHRISTIE MEMORIAL BURSARY — $500 for students pursuing a career in Corrections, International Development, Social Work or YM-YWCA. Must be a full time student registered in the Faculty of Physical Education, Recreation, Social Work, Criminology or related fields. Application should be supported by letter(s) of reference. Application must be in writing, giving full particulars, i.e., name, address, age, together with reason for applying for this bursary (in 500 words or less). Send application to: Mr. Graham Christie, Chairman, Hugh Christie Memorial Bursary Committee, South Slope Family YMCA, 282 W. 49th Avenue, Vancouver, B.C., V5Y 2Z5. Closing date for applications is Mid-November.

KIT DAVISON BURSARY ENDOWMENT FUND — Administered by the Muscular Dystrophy Association of Canada, B.C. Region. This bursary has been established to honour Mrs. Davison. It is intended for students with muscular dystrophy who wish to continue their studies at any B.C. postsecondary institution. Criteria: Candidates must be registered with the Association, have completed Grade 12, and be a resident of B.C. Amount: $500. Deadline for applications is August 1. Address: Suite 123, 1600 West 6th Avenue, Vancouver, B.C. V6J 1R3.

THE ENGINEERING INSTITUTE OF CANADA VANCOUVER ISLAND BRANCH BURSARY/SCHOLARSHIP — Bursaries (or scholarships) are offered annually to students who have graduated from high school located on Vancouver Island and who have completed the first year of a degree course in Engineering at an institution of higher education. Further information may be obtained from The Engineering Institute of Canada, Vancouver Island Branch, Scholarship Society, Box 5343, Station 'B', Victoria, B.C., V8R 6S4. Applications should be obtained from and submitted to the above address by July 1.

THE INDEPENDENT ORDER OF FORESTERS HIGH COURT OF BRITISH COLUMBIA AND ALASKA — A series of bursaries, to a maximum of $500 each are offered to members in good standing for not less than two years, or the dependent thereof, of the Independent Order of Foresters. Applicants must reside in the jurisdiction of the High Court of British Columbia and Alaska (Province of British Columbia; State of Alaska).
Requests for application forms must be made to: Mr. G.A. Francey, High Secretary, High Court of British Columbia and Alaska, 1902 London Street, New Westminster, B.C., V3M 3E5.
Completed application forms must be returned to the High Secretary no later than August 31 of the current bursary year.

THE INDEPENDENT ORDER OF ODD FELLOWS BURSARIES — Six bursaries of three hundred dollars ($300) each, provided by the Grand Lodge of British Columbia, I.O.O.F., the Grand Encampment, and the Rebekah Assembly are available annually for students in any year of any faculty. The awards will be made by a joint committee consisting of two representatives from each of the Grand Bodies. All applicants must have direct connection with one or more branches of the Order, through parents, grandparents, or close relatives. Special consideration will be given to applicants with financial need. Full details of the awards and application forms may be obtained from the Secretary of any Odd Fellows Lodge or Rebekah Lodge by May 1 so that they may be received by the Committee not later than May 15. All applications must be sponsored by an Odd Fellows Lodge, Rebekah Lodge, or Encampment. The above Committee will award annually an additional bursary of $200 to a student in a recognized theological college of university status. This bursary will be known as the Dr. A.M. Sanford Memorial Bursary. Applicants will follow the same procedures as for all other I.O.O.F. bursaries, except the family connections with the I.O.O.F. will not be required.

RUTH GARDNER AWARD — The Gardner Award is presented annually to one or more University of Victoria students to undertake a project at Juan de Fuca Hospitals. The award of up to $5,000 is intended to provide students with practical or research experience concerning the provision of health care for the elderly in the clinical environment of Juan de Fuca Hospitals.

The award is available to graduate or undergraduate students in Psychology, Social Work, Nursing, Public Administration and Health Information Science. The project will be carried out under the supervision of a faculty adviser and a hospital adviser. Criteria used to determine the award winner(s) will include merits of the proposed project and financial need of the applicant.

*Administered by the University of Victoria Foundation.

Requests for application forms or for further information should be directed to:
Administrator
Juan de Fuca Hospital Foundation
1450 Hillside Avenue
Victoria, B.C. V8T 2B7
The deadline for applications is May 31.

THE LISA HUUS MEMORIAL FUND — A bursary in the amount of not less than $1500 will be awarded annually to assist a severely disabled student to undertake or continue his or her postsecondary education at the University of Victoria. Applicants will be considered to have a severe disability provided there are two or more organ systems affected, e.g., muscular system or nervous system. Severe disabilities affecting only one organ system, but satisfying other criteria may be considered under special circumstances. Applications are obtainable from the Financial Aid Office, University of Victoria, or, The G.R. Pearkes Centre for Children, 3970 Haro Road, Victoria, British Columbia, V8N 4A9, and must be submitted not later than May 31.

CINDY JAMES-HACK MEMORIAL BURSARY — Up to $1,000 will be awarded to a final year Health Sciences or Nursing student at U.B.C. and University of Victoria pursuing a career related to child care. To qualify, an applicant must be a full time student going into the final year leading to a degree in Nursing. Students wishing to be considered for this bursary should apply by letter, supported by two references, setting out their career objectives and their financial circumstances. For further details and application contact L.Col. (Ret'd.) and Mrs. O.H. Hack, 10271 Cleveland Rd., Sidney, B.C. V8L 4X9. Applications must be received no later than mid-September.

LEONARD FOUNDATION AWARDS — The Leonard Foundation allocates each year a number of awards for which students at the University of Victoria are eligible. The awards are primarily intended to assist children of the clergy to attend University. Application forms, available from the Student Financial Aid Services Office, should be forwarded to the Honorary Secretary of the Foundation, Canada Trust Co., 20 Eglinton Avenue West, Toronto, Ontario M4R 2E2 not later than March 15th of each year. Whenever possible these applications should be filed in February. Applicants will be advised by the end of June of the Committee's decisions.

MAPLE RIDGE ARTS' COUNCIL BURSARY — A bursary of $1,000 is available to a Fine Arts student entering the second, third or fourth year of a degree or diploma program. Applicants must have graduated from School District No. 42 senior secondary schools and demonstrate financial need. It is also open to a mature student wishing to further his or her Fine Arts Education, but the applicant must have resided in the Maple Ridge area for five years. For more information and application forms, please contact the Maple Ridge Arts' Council, Box 331, Maple Ridge, B.C. V2X 7G2.

THE PISAPIO BURSARY PROGRAM — A bursary program to provide support to attend a recognized university for second, third, fourth and fifth year students and graduate students, whose homes are in Nelson, B.C.; within a fifty mile radius of Nelson, B.C.; or, in the East Kootenay regions. Applications must be received by the Pisapio Scholarships Trust, P.O. Box 804, Nelson, B.C. V1L 5S9, not later than September 25. A complete transcript of grades must accompany the application. Applicants will be notified of the results of this competition by October 25.

PROVINCE OF BRITISH COLUMBIA INTERNATIONAL YEAR OF DISABLED PERSONS BURSARIES — In recognition of the International Year of Disabled Persons, these bursaries were created to financially assist students with disabilities and will be awarded on merit and the basis of financial need. Several annual bursaries of $500 each will be available. To be eligible, the disabled student must be a resident of B.C., a Canadian Citizen or Landed Immigrant. Application forms can be obtained by contacting the Grant Coordinator, B.C. Paraplegic Foundation, 780 S.W. Marine Drive, Vancouver, B.C. V6P 5Y7.

THE ROBINSON AND BUCKLAND MEMORIAL BURSARY — The Robinson and Buckland Memorial Bursary is sponsored by the Canadian National Institute for the Blind. Captain Merrill C. Robinson, blinded since 1917, was the Director of the Canadian National Institute for the Blind, B.C.-Yukon Division, from 1929 to 1964. His contribution towards the development of CNIB and services to the blind of B.C.-Yukon will long be remembered. Donald Channing Buckland, a graduate and distinguished faculty member of the University of British Columbia, was himself overtaken by blindness a few years before his death. Bursaries are issued a maximum of two times to applicants enrolled in a four year program and once to those enrolled in a two year program. The student must be registered with the CNIB. Application forms are available from the CNIB, and are to be submitted no later than August 15th, to the Executive Director, CNIB, 350 East 36th Avenue, Vancouver, B.C. V5W 1C6.

THE ROYAL ARCH BURSARIES — Several bursaries, up to $500 each, have been established by the Royal Arch Masonic Order to give assistance to children of members in good standing, or of deceased members, of Chapters of the Order of British Columbia and Yukon Territory, who need assistance to continue their education by attendance at a recognized University, the B.C. Institute of Technology, a regional or community college in B.C., or any other B.C. technical or vocational school, including approximately equal proportions to students entering their first year, those entering their second year, and those entering higher years. Applications must be made on the form to be obtained from the office of the Grand Chapter of Royal Arch Masons of British Columbia and the Yukon, Room 104, West 8th Avenue, Vancouver, B.C. V6H 1C9, or from secretaries of the Chapters in British Columbia and the Yukon, and must be completed and returned to the Grand Chapter office by July 15. The application must indicate clearly (a) the applicant's relationship to a member of the Royal Arch Masonic Chapter in B.C. or the Yukon, giving the name of the chapter and attaching a letter from the secretary of the chapter confirming this fact, and (b) the applicant's financial circumstances and that of his or her immediate family, including information as to the parent's income. Qualifying candidates will be required to have good academic standing. A transcript of the academic record must be submitted. However, consideration will be based primarily on the need of the applicant and secondarily on relative academic achievement.

ROYAL CANADIAN BENEVOLENT FUND — Financial assistance in the form of interest free loans is available to members and former members of the Naval Forces of Canada or their dependants for purposes of attending college, university or other educational and vocational institutions. Bursaries are also available from the Chief Petty Officer Andrew McQueen Jack Educational Trust Fund. Contact RCN Benevolent Fund, P.O. Box 505, Station "B", Ottawa, Ontario K1P 5P6 for details, supplying full details of service, age and marital status, to establish eligibility.

ROYAL CANADIAN LEGION (PACIFIC COMMAND) BURSARIES — The Legion (Pacific Command) offers annually a number of awards for students proceeding from high school to university, and some awards for students entering second, third and fourth year. These bursaries are awarded on the basis of academic standing, financial need, and participation and achievement in student and community affairs. Preference is given to sons and daughters of deceased, disabled or other veterans, but applications from other worthy students are also considered. Further information may be obtained from Royal Canadian Legion, 3026 Arbutus Street, Vancouver, B.C. V6J 3Z2. The deadline date for application is May 31.

ROYAL INLAND HOSPITAL FOUNDATION BURSARIES — The Royal Inland Hospital Foundation provides four bursaries each year to graduates of secondary schools in the Thompson Nicola Regional District, who are planning a health related career. One bursary is $1000/year for the remaining duration of the health program the student is enrolled in. The other three are one time bursaries of $500. Once the successful applicants have been selected, the bursaries are disbursed after proof of registration in a health program is provided to the Foundation. Applications are obtainable from The Royal Inland Hospital Foundation, 311 Columbia Street, Kamloops, B.C. V2C 2T1 and must be submitted to the Royal Inland Hospital Foundation by May 31.

THE DEREK SALTZBERG MEMORIAL BURSARY — A bursary in the amount of $500 has been established by the Saltzberg family. The bursary will be used to assist a student who has muscular dystrophy and is registered with the Muscular Dystrophy Association of Canada. The award is tenable at any postsecondary institution in British Columbia. Applications are available from the Muscular Dystrophy Association of Canada, B.C. Region, Suite 123, 1600 West 6th Avenue, Vancouver, B.C. V6J 1R3. Completed applications must be received by the Association by August 1.

BARRY SULLIVAN, Q.C. MEMORIAL BURSARY FUND — Awards in the amount of $1,000 each will be awarded annually in each of one or more of three disciplines by the Barry Sullivan, Q.C. Memorial Bursary Fund Society in honor of the memory of Barry Sullivan who passed away March 21, 1988. Throughout his professional career and personal life, he contributed significantly to the three disciplines in which he held keen interest: law, social work as it relates to abuse of children, and education. His legendary endeavors included a report and recommendations on child abuse, the Sullivan Commission on Education and as a Counsel and Teacher in Criminal Law.
The funds will be awarded to students who display a combination of academic achievement, community involvement, dedication and imagination in their studies.
Applications must be submitted by October 31, to D. Murray, % Barry Sullivan, Q.C. Memorial Bursary Fund Society, 4th Floor, 910 Government Street, Victoria, B.,C. V8V 1X4. Successful candidates will be notified prior to December 31. For further information, please call 387-6089.

THE UNIVERSITY WOMEN'S CLUB OF THE COMOX VALLEY BURSARY — A $500 bursary is offered to a female graduate of a Comox Valley high school program who has completed at least one year of study in an accredited course at a Canadian university or community college. Further information may be obtained from Jacqueline Kennett, Bursary Committee, Box 226, Cumberland, B.C. V0R 1S0. Completed applications must be submitted by July 1.

SECTION 5

GRANTS, LOANS AND WORK-STUDY

A. GRANTS FOR RURAL STUDENTS

UNIVERSITY OF VICTORIA FACULTY RURAL STUDENT GRANTS — A number of $1,000 grants are awarded annually to deserving students who are B.C. residents and who are registering at the University of Victoria for the first time. The awards will be based on demonstrated financial need, but in similar or identical cases, academic performance will be considered. A major determining factor will be the distance between the applicant's permanent home address and Victoria. To be considered, applicants must complete the British Columbia Student Assistance Program Application Form, available from the Student Financial Aid Services Office at the University of Victoria, and must submit it by July 30.

B. LOANS FOR ELIGIBLE STUDENTS

PROVINCE OF BRITISH COLUMBIA LOANS — The Government of the Province of British Columbia provides loans to assist students who are residents of this province to commence or continue an acceptable program, such as a first degree at the undergraduate or equivalent level, while registered in at least 60% of a regular full-time program. This is considered to be 9 units during the Winter Session (September to April) and 4½ units during the Summer (May to August).

The Provincial Loan Plan is administered in conjunction with the Canada Student Loan Plan and the two plans are known as The British Columbia Student Assistance Program (B.C.S.A.P.). Similar plans are in effect in other Canadian Provinces for students who are not considered to be residents of British Columbia.

The purpose of B.C.S.A.P. is to assist students whose resources are insufficient to cover the cost of full-time studies. Assistance under the program is awarded when the financial resources available to students from parents, summer work or other sources are insufficient to meet estimated educational costs. Application forms for B.C.S.A.P. are available from the Student Financial Aid Services Office after April 1st, and should be returned by June 30th for the Winter and by March 15th for the Summer. Students who have not submitted their loan applications by September 1 can not expect to have their loans processed in time to meet fee payment deadlines and will not be exempt from paying any penalty charged for late payment or to be reinstated after having their registration cancelled.

CANADA STUDENT LOANS PLAN — The Government of Canada introduced this plan in 1964 to assist students who would be unable to pursue full time (60%) postsecondary studies without loan assistance. Currently the maximum amount of loan funds available is $105 per week of study. Thus, a student studying for one 17 week semester may obtain a maximum loan of $1785, while a student studying 40 weeks on a P.D.P.P. course may obtain a loan of $4200.

No payments are made while the borrower is a full time (60%) student nor for six months thereafter. Interest during this period is paid to the bank by the Federal Government on behalf of the student. Payments commence six months after the borrower ceases to be a full time (60%) student. Borrowers are required to repay principal and interest by regular monthly instalments.

In no case may the repayment period exceed 9½ years from the date upon which you become liable to repay your debt.

Need for loan assistance is determined by Provincial Loan Authorities in accordance with administrative criteria established for use throughout Canada. In B.C., that authority is the British Columbia Student Loan Committee, Student Services Branch, 818 Broughton Street, Victoria, B.C. V8W 1E4.

A parental contribution table is an integral part of the criteria and is applied in all cases where the student has not established financial independence as defined under the plan. Students are expected to save a substantial amount of any income from summer employment. A student contribution table is used when net income from the summer exceeds $3120.

As noted above, the Canada Student Loan Plan is administered in conjunction with the Province of British Columbia Loan Plan, known collectively as the British Columbia Student Assistance Program (B.C.S.A.P.). Application forms for B.C.S.A.P. are available from the Student Financial Aid Services Office after April 1, and should be returned by June 30 for the Winter and by March 1 for the Summer. Students who have not submitted their loan applications by September 1 can not expect to have their loans processed in time to meet fee payment deadlines and will not be exempt from paying any penalty charged for late payment or to be reinstated after having their registration cancelled.

B.C. YOUTH FOUNDATION LOANS — Students who do not qualify for Canada Student Loans because of high family income can inquire at the Student Financial Aid Services Office to determine their eligibility for assistance from this foundation. Loans are available to young persons up to 30 years of age who are residents of B.C. and who are able to obtain guarantors for the loans satisfactory to the Board of Directors of the B.C. Youth Foundation.

P.E.O. SISTERHOOD EDUCATION LOAN FUND — Women students in any year of a University course who do not qualify for Canada Student Loans, or who may find that their loan is not adequate for all their costs, may request a loan from this philanthropic organization at any time. Since the fund is administered from the U.S., prospective applicants should be prepared to wait up to three months before obtaining money.

Fourth year and graduate students may be granted the maximum amount of loan, which is $3,500, in one year. Undergraduates may apply for and be granted the maximum loan of $3,500 for two or more years of study but may draw only $1,750 of the loan in one academic year. First year students must complete one term's work satisfactorily before making application. A loan may be considered for summer school.

Loans are made for periods of up to five years. Interest at the rate of 6% is to be paid annually, and the student is expected to begin repayment of the principal as soon as she is out of University and employed.

Students interested in finding out more about this loan fund are advised to make appointments with an adviser from the Student Financial Aid Services staff.

THE UNIVERSITY OF VICTORIA EMERGENCY LOAN FUND — The University of Victoria, through the Student Financial Aid Services Office, has a loan fund to assist students requiring financial assistance in emergency situations. The loans are interest free if paid prior to the due date, thereafter at an interest rate of 2% per month. This loan fund is not designed to meet general education costs faced by all students but rather specific emergency items such as expenses involved in travelling

to visit sick relatives. As a general rule adult guarantors are required to cosign the loan application, but this may be waived if the student leaves a postdated cheque for the full amount as security, or if the student is waiting for government assistance which covers the loan. Students applying for an emergency loan must be interviewed by an adviser from the Student Financial Aid Services staff and must sign a loan agreement.

Contributions to the University loan fund have been made through the generosity of the following donors:

The University of Victoria President's Fund	$17,500
The Peter Cubis Memorial Fund (Donated by A.M.S.)	9,000
The Alma Mater Society	5,000
The University Challenge Team Loan Fund	3,500
The Milva Reid Revolving Loan Fund	500
The University Extension Association Centennial Loan Fund	400
The John C. Lort Revolving Loan Fund	250

The donors and the University share the hope that students who have had help from this fund will themselves help others as their means may allow, either by contributing to one of the above funds, or by establishing similar funds.

C. WORK STUDY

The Work Study Program is a component of the British Columbia Student Assistance Program (B.C.S.A.P.). It is designed to provide on campus work experience for students requiring financial assistance. Students at the University of Victoria demonstrating financial need and British Columbia residency, under the terms specified by B.C.S.A.P., will be considered for the Work Study Program.

The objectives of the program are to:

(i) Aid students in reducing indebtedness incurred while pursuing postsecondary studies.

(ii) Assist students in meeting additional costs that are not usually covered by the loan component of B.C.S.A.P.

(iii) Assist in meeting shortfall of funds caused by the absence of expected students savings or expected parental/family contributions.

(iv) Provide students with career related job experiences wherever possible.

The number of positions available to the University of Victoria are limited and therefore there is no guarantee of job placement for any student. Jobs under the program are administered according to internal policies and procedures established by the University of Victoria and may differ from policies established at other institutions.

Students wishing to be considered for a Work Study position must begin by completing an application for B.C.S.A.P. and submitting the form to the Student Financial Aid Services Office, Second Floor, University Centre. Financial need will be assessed and a loan award may be recommended. The money earned from a Work Study job may then be used either to reduce loan indebtedness, or to supplement the loan where additional need is demonstrated.

At the University of Victoria, a prospective Work Study applicant who has submitted a B.C.S.A.P. application will request an interview with a staff member of the Student Financial Aid Services Office. If the student is eligible and is prepared to fulfill the obligations incurred with the program, the applicant will be sent to the Canada Employment Centre on Campus for appropriate placement. The final decision on hiring will be made by the project supervisor.

It is recommended that prospective applicants wait until they have worked out their timetable for the year before applying for a Work Study position.

SCHOLARSHIPS, MEDALS AND PRIZES

GENERAL REGULATIONS

All inquiries concerning material in this section should be directed as follows:

Undergraduate Entrance Awards: Administrative Registrar
Undergraduate Awards: Administrative Registrar
Graduate Awards: Faculty of Graduate Studies

Undergraduate Awards:

All undergraduate awards adjudicated by the University of Victoria are administered by the Senate Committee on Awards.

To be eligible for any scholarship offered by the University of Victoria, except the President's Scholarships for Part Time Undergraduate Students, an undergraduate student must take a full year's program. This is defined as 15 units of credit work of which 13 units must be graded. The standing of students who are registered in more than 15 units of courses will be determined on the basis of the grades of the best 15 units of courses. Physically handicapped students whose course load has been reduced on medical advice to fewer than 15 units are eligible to compete for awards administered by the University of Victoria on the basis of reduced course load. Applications should be made to the Administrative Registrar.

Except where the terms and conditions of an undergraduate award specifically state otherwise, award winners must normally return to the University of Victoria in the next winter session and enroll in a full program.

Deferral of an award for up to one year (except Faculty of Law, where up to two years may be permitted) may be granted on written application to the Senate Committee on Awards. Students who enroll in a full program and subsequently withdraw from courses, so that they fall below 15 units, will have the value of their award reduced accordingly, if the amount exceeds their assessed fees, and should note that they will only be eligible for part time awards in the following year.

Graduate Awards:

All graduate awards are administered by the Faculty of Graduate Studies. To be eligible for graduate awards offered by the University, a graduate student must satisfy the terms and conditions established for individual awards by the Faculty of Graduate Studies.

Where applications are necessary for graduate awards, students should contact the Faculty of Graduate Studies to determine the relevant deadline dates.

Regulations Governing All Awards:

The University reserves the right to limit the amount of money awarded to any student and, if necessary, to reassign awards to other students by reversion.

Undergraduate Students are eligible to receive scholarships, awards and prizes to a maximum of $5,000 a year, except for the Faculty of Law which has a maximum of $8,000.

Except where the donor directs otherwise, the proceeds of awards issued by or through the University will be applied towards the total tuition fees for the academic year. If the amount of the award or awards exceeds the unpaid fees for the academic year, the excess balance will be paid to the student only if registration in a full course load is maintained.

Other awards, such as medals or book prizes, if not presented directly by the donors or their agents, will be forwarded to the winners upon receipt.

Any award may be withheld or cancelled for any of the following reasons: lack of suitable candidates; failure to meet terms and conditions of the award; withdrawal from the University; withdrawal of the award by the donor.

DEFINITIONS

(a) An award is any scholarship, fellowship, bursary, medal or prize.
(b) A scholarship or fellowship is a monetary award based on academic merit or excellence in the area to which the award pertains.
(c) A medal is an award based on academic merit or excellence in the area to which the award pertains.
(d) A prize is an award in the form of cash or of some tangible object such as a book, based on academic merit or excellence in the area to which the award pertains.

NOTE: Except where noted in the terms of reference, none of these above awards requires that the student discharge any duties for the University or any other agency. This applies to awards administered by the University of Victoria only.

LIST OF AWARDS

The sections of the Calendar which follow show awards grouped under certain headings:

Section 1: Entrance awards:
A. Administered by University of Victoria. (See this page.)
B. Administered by The University of British Columbia. (See page 337.)
C. Administered by the Association of Universities and Colleges of Canada. (See page 338.)
D. Administered by other institutions and organizations. (See page 338.)
Section 2: Government of British Columbia Awards. See page 340.
Section 3: Undergraduate awards for which no application is necessary: selection of recipients is made by the Senate Committee on Awards. See page 341.
Section 4: Undergraduate awards for which application must be made to the Senate Committee on Awards. See page 358.
Section 5: Undergraduate awards administered by the University of British Columbia and other institutions and organizations. See page 361.
Section 6: Awards for graduate study. See page 364.

SECTION 1

ENTRANCE AWARDS

A. ENTRANCE AWARDS ADMINISTERED BY UNIVERSITY OF VICTORIA

Application forms for the following areas may be obtained from the Office of the Administrative Registrar, University of Victoria, Victoria, B.C., and must be returned by April 15, unless otherwise indicated. Names of winners will be announced by May 31.

PRESIDENT'S ENTRANCE SCHOLARSHIPS — Scholarships of $2000 each are awarded annually to British Columbia secondary school graduates who are entering the University of Victoria. The awards will be made to students who achieve a total score of 2000 or higher on their best three Provincial Scholarship examinations. Recipients will be selected by the Senate Committee on Awards.

The President's Entrance Scholarships are named to recognize the contributions made by individuals when Victoria College became a University, and to recognize the Victoria College Class of 1903. The following list identifies these scholarships:

The Ernest William Arnott Memorial Scholarship
The Honorable William Andrew Cecil Bennett Memorial Scholarship
The Judge Joseph Badenoch Clearihue Memorial Scholarship
The Lloyd George McKenzie Scholarship
The William Clark Mearns Scholarship
The J. Richard Murray Scholarship
The Captain George Ronald Newell Memorial Scholarship

The Major-General George Randolph Pearkes Memorial Scholarship
The Hugh Roulston Stephen Scholarship
The Richard Biggerstaff Wilson Scholarship
The Harry W. Young Scholarship
The Lilian M. Mowat Memorial Scholarship
The Kate Isabel Pottinger Memorial Scholarship
The Clifford J. Rogers Memorial Scholarship
The Sara Spencer Memorial Scholarship
The Josephine Wollaston Memorial Scholarship
The Freddie Wood Memorial Scholarship

PRESIDENT'S REGIONAL ENTRANCE SCHOLARSHIPS — Four scholarships of $1500 are awarded annually within each college region in British Columbia to students with high academic standing and broad interests who are entering the University of Victoria directly from British Columbia secondary schools or regional colleges. Normally one of the four scholarships is reserved for a college student. The assessment of the academic standing of the secondary school students will be based on both secondary school course and Provincial Scholarship examination results. The assessment of regional college students will be based on college course results.

A student may become a candidate for a scholarship either by applying in writing directly to the University of Victoria Senate Committee on Awards or by nomination solicited annually by the University from the principals of the secondary schools and community colleges in British Columbia. Recipients will be selected by the Senate Committee on Awards. Normally the names of award winners will be announced by May 31; final confirmation of the secondary school recipients will take place after the release of the Provincial Scholarship Examination results in the summer.

In order to increase the identification of each scholarship with a particular college region and to honour a person of regional historical significance, the scholarships are named after men and women who contributed to the advancement and development of the region and its people and who were highly respected members of their community. The following list identifies the scholarships for each region.

Camosun College:
The Lim Li Bang Memorial Scholarship
The Martin Grainger Memorial Scholarship
The Sophie Theresa Pemberton Memorial Scholarship
The Sister Mary Providence Memorial Scholarship

Capilano College:
The Cates Family Memorial Scholarship
The William and Catherine Keene Memorial Scholarship
The Andy Paull Memorial Scholarship
* The Alfred Wallace Memorial Scholarship

Cariboo College:
The Joseph and Judge Henry Castillou Memorial Scholarship
The Louis Le Bourdais Memorial Scholarship
The Norman Lee Memorial Scholarship
The Doctor Masajiro Miyazaki Memorial Scholarship

College of New Caledonia:
The Chief Kwah Memorial Scholarship
The John McInnis Memorial Scholarship
The Peter Skene Ogden Memorial Scholarship
The Dr. Ross Stone Memorial Scholarship

Douglas College:
The Arthur Wellesley Gray Memorial Scholarship
The Thomas Haney Memorial Scholarship
The Judge Frederic William Howay Memorial Scholarship
The Ernie Winch Memorial Scholarship

East Kootenay College:
The Honourable Frederick Aylmer Memorial Scholarship
The Feuz Memorial Scholarship
The Chief Isadore Memorial Scholarship
The Tom Uphill Memorial Scholarship

Fraser Valley College:
The Captain Lewis Nunn Agassiz Memorial Scholarship
The John Alexander Catherwood Memorial Scholarship
The Allen Casey Wells Memorial Scholarship
The York Family Memorial Scholarship

Kwantlen College:
The Thomas Kidd Memorial Scholarship
The Alexander Dougal Matheson Memorial Scholarship
The Steves Family Memorial Scholarship
The William Templeton Memorial Scholarship

Malaspina College:
The Mark Bate Memorial Scholarship
The John Newell Evans Memorial Scholarship
The Major Charles Ferguson Hoey Memorial Scholarship
The Mayo Singh Memorial Scholarship

Northern Lights College:
The Miss E.M. Claxton Memorial Scholarship
The Doctor George Dawson Memorial Scholarship
The Grant McConachie Memorial Scholarship
The Hector Tremblay Memorial Scholarship

Northern Island College:
The Eric Duncan Memorial Scholarship
The Roderick Haig-Brown Memorial Scholarship
The Chief Mungo Martin Memorial Scholarship
The Chief Pasala Memorial Scholarship

Northwest College:
The Dr. John Antle Memorial Scholarship
The Jean Jacques Caux "Cataline" Memorial Scholarship
The Margaret Hankin Loring Memorial Scholarship
The Alice Tomlinson Memorial Scholarship

Okanagan College:
The Susan Allison Memorial Scholarship
The Father Charles Pandosy Memorial Scholarship
The Francis Xavier Richter Memorial Scholarship
The Honourable Forbes George Vernon Memorial Scholarship

Selkirk College:
The Randolph William Diamond Memorial Scholarship
The H.W. (Bert) Herridge Memorial Scholarship
The John Fred Hume Memorial Scholarship
The Reverend Henry Irwin "Father Pat" Memorial Scholarship

Vancouver Community College:
The Won Alexander Cumyow Memorial Scholarship
The David Oppenheimer Memorial Scholarship
The Tsutae and Hanako Sato Memorial Scholarship
The Mildred Valley Thornton Memorial Scholarship

* THE RALPH BARBOUR BURRY MEMORIAL SCHOLARSHIPS IN MUSIC — Three scholarships in varying amounts (minimum award $800) are awarded annually to Music students. Preference will be given to entering students in any year. The awards will be based on excellence in music. In the case of two equally gifted candidates, need will be the determining factor. Selection will be made by the Senate Committee on Awards upon the recommendation of the School of Music.

* THE L. AND G. BUTLER SCHOLARSHIPS FOR THE DISABLED — An award of six hundred dollars ($600) is made annually on the basis of academic performance to a disabled student attending the University of Victoria. The recipient may be a newly admitted or returning student. Students interested in this scholarship should refer to the paragraph on undergraduate scholarship eligibility in the General Regulations, above. Application forms may be obtained from the Office of the Administrative Registrar and must be submitted by April 15. Selection of the recipients will be made by the Senate Committee on Awards.

CANADIAN UNION OF PUBLIC EMPLOYEES SCHOLARSHIPS — The C.U.P.E. will provide annual scholarships of $300 each to five promising and deserving students who will register in the First Year at the University of Victoria. Students must have obtained first class or a good second class standing on their Senior Secondary statement of marks issued for graduation. These scholarships are open only to sons or daughters of members of contributing locals of the Canadian Union of Public Employees of the Greater Victoria area. Recipients will be selected by the Senate Committee on Awards in consultation with officials of the C.U.P.E. Scholarship Fund. Applications must be submitted not later than July 31.

THE C.H. DOWLING MEMORIAL AWARD — An award of $500 is made annually to a native Indian student who is a resident of British

*Administered by the University of Victoria Foundation.

Columbia and is entering the University of Victoria directly from Grade 12 or a regional college. Selection will be made by the Senate Committee on Awards on the basis of scholastic achievement; preference will be given to a student entering a program in the Humanities or the Social Sciences. The award may be renewed.

* THE GERTRUDE HUNTLY DURAND MEMORIAL SCHOLARSHIP — A scholarship of $800 will be awarded annually to a piano student, in any year, who has demonstrated potential in areas of accompanying or teaching. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the School of Music.

FACULTY OF ENGINEERING: DEAN'S ENTRANCE SCHOLARSHIPS — A number of scholarships of $2000 each plus tuition and fees will be awarded annually to students with high academic standing who are entering the Faculty of Engineering at the University of Victoria directly from British Columbia secondary schools or regional colleges. The assessment of academic standing of the secondary school students will be based on secondary school course results while assessment of regional college students will be based on college course results. Recipients will be selected by the Senate Committee on Awards upon the recommendation of the Faculty of Engineering. Normally the names of award winners will be announced by May 31.

* THE WALTER J. FLETCHER PIANO SCHOLARSHIP — A scholarship of $550 will be awarded annually to an outstanding student, in any year of the Bachelor of Music program, whose principal instrument is the piano. The selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the School of Music.

ALDYEN HAMBER IODE ENTRANCE SCHOLARSHIP — Six hundred dollars ($600) awarded annually to a deserving woman student entering the first year at the University of Victoria. Applicants must write the British Columbia Scholarship examinations. Selection of the recipient will be made by the Senate Committee on Awards after consultation with the donor.

THE HARBORD COMPANY SCHOLARSHIP — Five hundred dollars ($500) awarded annually to the most promising scholar leaving School District No. 61, entering the Faculty of Fine Arts at the University of Victoria and intending to specialize in Music. Selection of the winner will be made by the Senate Committee on Awards after consultation with the appropriate officials of School District 61 and the School of Music.

THE HONDA CITY CITIZENSHIP AWARD — An award of $1,000 is made annually to a student who is graduating from a secondary school with at least a B average and who is entering year 1 of any course of study at the University of Victoria. A candidate must be a resident of the Capital Regional District and must demonstrate a record of good citizenship through participation and leadership in any one or a combination of community activities, student organizations and sports. Applications or nominations must be received in writing by the Administrative Registrar before April 15. Selection of the successful candidate will be made by a committee consisting of the Director of Student Services, the Vice-President, Academic or designate and two members of the community nominated by Honda City.

* THE WILLARD E. IRELAND ENTRANCE SCHOLARSHIP — A scholarship of approximately $1350 will be awarded annually to an outstanding student entering the School of Music at the University of Victoria. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the School of Music.

J.J. JOHANNESEN SCHOLARSHIP IN MUSIC PERFORMANCE — One or two awards of equal amounts up to a total of $1,500 will be made annually to undergraduate music students from any part of the world demonstrating excellence and/or potential in performance, as soloists in the area of strings, piano and flute. Recipients may be newly admitted or returning students. Selection will be made by the Senate Committee on Awards upon the recommendation of the School of Music.

* THE BETTY AND GILBERT KENNEDY ENTRANCE SCHOLARSHIP IN ENGINEERING — A scholarship of approximately $1000 will be awarded annually to an outstanding student entering the Faculty of Engineering from British Columbia secondary schools or regional colleges. The assessment of academic achievement of secondary school students will be based on secondary school grades while assessment of college students will be based on college grades. Recipients will be selected by the Senate Committee on Awards upon the recommendation of the Faculty of Engineering.

LABATT BREWERIES OF BRITISH COLUMBIA LIMITED SCHOLARSHIP — A scholarship of one thousand dollars ($1,000) is provided by Labatt Breweries of British Columbia Limited to be available for students who are resident in British Columbia and who are proceeding directly from Grade 12 to a full course of study at the University of Victoria. The winner will be selected by the Senate Committee on Awards on the basis of scholastic standing, character and participation in school and community affairs. Candidates must be eligible in all respects to compete for Government scholarships and must write the Government scholarship examinations, conducted by the Ministry of Education.

* MADAM SOONG CHING LING MEMORIAL SCHOLARSHIP — An Award of $6000 is made annually to a student from the People's Republic of China who is studying at the University of Victoria. The selection of the recipient will be made by the Chinese People's Association for Friendship with Foreign Countries.

N.B.: i) The student must satisfy the usual university admission requirements in terms of academic standards and English language ability.

ii) The award can be renewed; the Association will decide annually whether to renew the award or to recommend a new recipient.

iii) The recipient's tuition fees will be covered to the amount of $1,500 by the Ian and Gillian Stewart Scholarship (see below).

* THE JOHN LOCKE MALKIN ENTRANCE SCHOLARSHIPS — Up to six awards of either $4500 or $3000 are made annually to students of exceptional academic promise entering the University of Victoria from secondary school and/or college. The awards of $4500 will be reserved for students of extraordinary academic promise. Candidates must have a very strong academic record in their last two years of study. If a student maintains a grade point average of 7.50 or better, the scholarship is automatically renewed (and could be increased with exceptional performance) for each year of the student's full time study (15 units) until completion of a first degree or for a maximum of five years, whichever is the shorter period. A student whose grade point average falls between 7.00 and 7.49 may file a written appeal with the Senate Committee on Awards to seek special consideration for the renewal of the scholarship. No renewal will be considered if a student's average falls below 7.00. In extenuating circumstances a student may, upon application to the Senate Committee on Awards, defer the acceptance of the initial scholarship or may defer the renewal of a scholarship for a maximum of one year.

A student may become a candidate for the scholarship either by applying in writing directly to the University of Victoria Senate Committee on Awards giving the name of his or her school together with the principal's name or by nomination solicited annually by the University from principals of secondary schools and colleges. The completed set of application and nomination material must be received by the University no later than March 15. Normally award winners will be announced by May 31.

* T.S. McPHERSON ENTRANCE SCHOLARSHIPS — Up to ten T.S. McPherson Scholarships to commence in September of each year will be awarded to students of exceptional promise entering the University of Victoria directly from British Columbia secondary schools or regional colleges; normally two of the ten scholarships will be reserved for regional college students. Eight of the scholarships will have a value of $3000. The other two will have an annual value of $4500 and will be reserved for the two candidates the Committee feels are the most outstanding each year. If a student maintains a grade point average of 7.5 or higher, the scholarship will be automatically renewed for each year of a student's full time study (15 units) until the completion of a first degree or for a maximum of five years, whichever is the shorter period. A student whose grade point average falls between 7.0 and 7.49 may file a written appeal with the Senate Committee on Awards to seek special consideration for renewal of the scholarship. No renewal will be considered if a student's grade point average falls below 7.0. In extenuating circumstances a student may, upon application to the Senate

*Administered by the University of Victoria Foundation.

Committee on Awards, defer the acceptance of the initial scholarship or may defer the renewal of a scholarship for a maximum of one year. Candidates must have a very high academic record in their last two years at secondary school and/or regional college. Secondary school candidates must have achieved outstanding scores on the British Columbia Provincial Scholarship examinations. approximately fifteen candidates will be selected by the University of Victoria Senate Committee on Awards for personal interviews on the basis of their results in academic courses and recommendations by the principals of their schools and colleges as to their academic excellence, breadth of interests and leadership qualities.

A student may become a candidate for the Scholarship either by applying in writing directly to the University of Victoria Senate Committee on Awards giving the name of his or her school together with the principal's name or by nomination solicited annually by the University from the principals of the secondary schools and community colleges in British Columbia. The completed set of application and nomination material must be received no later than March 15.

Awards will be made by May 31 and may have dollar values further increased as a consequence of very high Provincial Scholarship examination results.

* PERFORMANCE SCHOLARSHIP IN MUSIC — One or more awards are made annually to student(s) for outstanding achievement in performance. The recipients may be newly admitted or returning students. Selection will be made by the Senate Committee on Awards upon the recommendation of the School of Music's Performance faculty.

* THE DOUGLAS ROSS MEMORIAL SCHOLARSHIP — An award of four hundred dollars ($400) is made annually to a student for outstanding achievement in piano performance. The recipient may be a new or a returning student. Selection will be made by the Senate Committee on Awards upon the recommendation of the School of Music.

* THE SCHOOL OF PHYSICAL EDUCATION ENTRANCE SCHOLARSHIP — A scholarship of $300 will be awarded annually to an outstanding student transferring into the School of Physical Education from a college or university. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Faculty of Education.

THE IAN AND GILLIAN STEWART SCHOLARSHIP — An award up to the amount of tuition fees, but not exceeding $1,500, is made annually to the student selected to receive The Madam Soong Ching Ling Memorial Scholarship.

THE DAISIE THIRLWALL SCHOLARSHIPS IN VIOLIN — Up to three scholarships in varying amounts are awarded annually to gifted violinists who demonstrate excellence or potential in performance and who are registered in the Bachelor of Music program. Preference will be given to newly admitted students. In the event there are no qualified violinists in any given year, other string instrumentalists will be considered. In the case of equally qualified candidates, need shall be the determining factor. Selection will be made by the Senate Committee on Awards upon the recommendation of the School of Music.

UNIVERSITY OF VICTORIA ENTRANCE SCHOLARSHIPS — Scholarships of $1500 are awarded annually to students with high academic standing who are entering the University of Victoria directly from British Columbia secondary schools or regional colleges. The assessment of the academic standing of the secondary school students will be based on both secondary school course and Provincial Scholarship examination results. The assessment of regional college students will be based on college course results.

THE WEST KOOTENAY POWER SCHOLARSHIP — An award of $1500 is made annually to a student who is graduating from a secondary school in the West Kootenay Power service region, with at least a B average and who is entering year 1 at the University of Victoria. A candidate must demonstrate a record of good citizenship through participation and leadership in one or a combination of community activities, student organizations and sports. Applications or nominations must be received in writing by the Administrative Registrar before April 15. Selection of the successful candidate will be made by the Director of Student Services and the Vice-President Academic or designate.

* THE BRIAN WILLIAMS MEMORIAL SCHOLARSHIP — Up to two $500 scholarships will be awarded annually to students entering first year who intend to be involved in the University rugby program. The students must normally have at least a B average and strong rugby potential. The scholarships have been funded by the Valhallians Sport Club and University of Victoria rugby players. Selection of the recipients will be made by the Senate Committee on Awards on the recommendation of a selection committee consisting of the University rugby coach, a recent University graduate who played rugby, and a faculty member not associated with rugby. Application forms may be obtained from the Office of the Administrative Registrar and must be submitted by April 15.

* VICTORIA MUSICAL ARTS SOCIETY SCHOLARSHIP — An award of not less than $1,000 will be given annually to an outstanding student, entering or continuing in the School of Music and intending to pursue a career in music. The student must have been a resident of the Greater Victoria area for at least two years and not have been a previous recipient of this award. Selection will be made by the Senate Committee on Awards upon the recommendation of the School of Music.

B. ENTRANCE AWARDS, ADMINISTERED BY THE OFFICE OF AWARDS AND FINANCIAL AID, THE UNIVERSITY OF BRITISH COLUMBIA, 101-2075 WESBROOK MALL, VANCOUVER, B.C. V6T 1W5

Some changes in the following awards may have been made after this Calendar went to press. Please refer to the University of British Columbia Calendar.

Entrance Scholarships which must be applied for, on the appropriate U.B.C. form, by May 15 unless otherwise stated.

DAIRY INDUSTRY CREDIT UNION SCHOLARSHIPS — Two scholarships in the amount of $500 each have been offered by the Dairy Industry Credit Union to students who are beginning or continuing a full program of studies at the University of British Columbia, or Simon Fraser University, University of Victoria, the B.C. Institute of Technology or a B.C. college. To be eligible, an applicant must be an active member or the son, daughter, grandson or granddaughter of an active member of the Dairy Industry Credit Union. The Scholarship will be awarded to the candidate who, in the opinion of the University, in consultation with the Credit Union, is best qualified in terms of academic merit and financial need. Where possible, one scholarship will be offered to a student attending one of the Universities and the second, to a student attending B.C.I.T. or a college.

TELECOMMUNICATIONS WORKERS UNION, J. DOUGLAS BOOTH MEMORIAL SCHOLARSHIP — The Telecommunications Workers Union offers a $1,000 scholarship to the son or daughter of a member with at least twelve months continuous service or of a deceased member with the same service. The scholarship is open to students proceeding from Grade 12 to a full program of studies at UBC, University of Victoria, Simon Fraser University, British Columbia Institute of Technology, or any accredited public college in B.C. The winner is selected by UBC, in consultation with the Union. The financial circumstances of applicants and their families will be considered. Applications must contain details of family service with the Union. The successful applicant will not be eligible to simultaneously hold any other Telecommunications Workers Union Scholarships.

TELECOMMUNICATIONS WORKERS UNION, THE THOMAS WARD STANLEY MEMORIAL SCHOLARSHIP — The Telecommunications Workers Union offers a $1,000 scholarship to the son or daughter of a member with at least twelve months continuous service or of a deceased member with the same service. The scholarship is open to students proceeding from Grade 12 to a full program of studies at UBC, University of Victoria, Simon Fraser University, British Columbia Institute of Technology, or any accredited public college in B.C. The winner is selected by UBC, in consultation with the Union. The financial circumstances of applicants and their families will be considered. Applications must contain details of family service with the Union. The successful applicant will not be eligible to simultaneously hold any other Telecommunications Workers Union Scholarships.

TELECOMMUNICATIONS WORKERS UNION SCHOLARSHIPS — The Telecommunications Workers Union offers three scholarships in the amount of $750 each to the son or daughter of a member with at least twelve months continuous service or of a deceased member with the same service. The scholarship is open to students proceeding from Grade 12 to a full program of studies at UBC, University of Victoria,

*Administered by the University of Victoria Foundation.

Simon Fraser University, British Columbia Institute of Technology, or any accredited public college in B.C. The winners are selected by UBC, in consultation with the Union. The financial circumstances of applicants and their families will be considered. Applications must contain details of family service with the Union. The successful applicant will not be eligible to simultaneously hold any other Telecommunications Workers Union Scholarships.

THE WILLIAM L. HURFORD MEMORIAL SCHOLARSHIP — A scholarship of $1000, offered in memory of William L. Hurford by the British Columbia Maritime Employers' Association, is open to sons and daughters of members, in good standing, of the International Longshoremen's and Warehousemen's Union. The scholarship will normally be awarded to the candidate who is proceeding in the fall to a full program of studies at The University of British Columbia, University of Victoria, Simon Fraser University, or a college in B.C. The donors reserve the right to withhold the award if the academic standing of candidates is not sufficiently high or to reaward the scholarship if the winner receives other scholarships of substantial value.

THE INTERNATIONAL LONGSHOREMEN'S AND WAREHOUSEMEN'S UNION ENTRANCE SCHOLARSHIPS — Four scholarships of $1375 each are offered to members, and sons and daughters of members, in good standing, of the International Longshoremen's and Warehousemen's Union. They will normally be awarded to the candidates who are proceeding in the fall to a full first year program of studies at Simon Fraser University, The University of British Columbia, the University of Victoria, or any accredited regional college in B.C. The donors reserve the right to withhold awards if the academic standing of candidates is not sufficiently high, or to reaward scholarships if winners receive other scholarships of substantial value.

THE UNITED FOOD & COMMERCIAL WORKERS' UNION, LOCAL 1518, SCHOLARSHIPS — Ten scholarships of $1000 each are offered to students beginning or continuing studies in a full academic program at the University of British Columbia, the University of Victoria, Simon Fraser University, the British Columbia Institute of Technology, or at a college in B.C. Six awards will be made to students entering from Grade XII and four awards will be made to continuing students. The awards will normally be made to applicants with the highest standing in the final examinations. Students entering from Grade 12 will be considered on the basis of final marks needed for university or college entrance. To be eligible, a candidate must be a member, or the son, daughter, or legal ward of a member of the Union in good standing. Those who wish to be considered must give full details of their own or their parents' membership in the Union.

RETAIL, WHOLESALE UNION, LOCAL 517, SCHOLARSHIP — This scholarship of $250 is offered to dependents or legal wards of members of Local 517. It is open to competition to applicants who are proceeding from Grade 12 to any accredited University or College of British Columbia, in a full program leading to a degree or diploma. In the selection of the winner the basic factor will be the academic standing of the applicant. Should there be a tie the financial need of the applicant and the applicant's family shall be the deciding factor. The winner will be selected in consultation with the Union.

THE VANCOUVER SUN SCHOLARSHIP FOR SUN CARRIERS — The Vancouver Sun offers annually two scholarships of $500 each to students proceeding from Grade 12 to the first year at The University of British Columbia, the University of Victoria, Simon Fraser University or B.C.I.T. To be eligible, applicants must have been carriers of the Vancouver Sun for at least two consecutive years. The awards will normally be made to the students with the highest standing based on their final secondary school transcript but in no case will an award be made to a student who obtains a standing of less than 75%. Winners of these scholarships who, in successive years of their undergraduate courses maintain a 75% standing overall (or rank in the top 10% of their year and faculty) will be eligible for renewals of $500 a year until graduation, not exceeding a total of five payments in all. Holders of this scholarship will not be precluded from enjoying the proceeds of other awards, however, a student may not simultaneously hold this scholarship and the Vancouver Sun Special Scholarship for Carriers. The application must be accompanied by the Service certificate of the Vancouver Sun.

UNITED ASSOCIATION OF PLUMBERS AND STEAMFITTERS, LOCAL 170, SCHOLARSHIPS — Two scholarships of $500 each are provided annually by the United Association of Plumbers and Steamfitters, Local 170, to students entering first year at any public university in British Columbia, and proceeding to a degree in any field. To be eligible, a candidate must be the son, daughter or legal dependent of a member in good standing of the United Association of Plumbers and Steamfitters, Local 170. The Union reserves the right to withhold an award if candidates do not obtain sufficient high standing or if they receive other major awards.

THE VANCOUVER SUN SPECIAL SCHOLARSHIP FOR SUN CARRIERS — The Vancouver Sun offers annually a scholarship of $500 to a student proceeding from Grade 12 to the first year at The University of British Columbia, the University of Victoria and Simon Fraser University or the British Columbia Institute of Technology. To be eligible, an applicant must have been a carrier for the Vancouver Sun for at least two consecutive years. An applicant will be considered only if he/she obtains an overall average of at least 75% based on his/her final secondary school transcript. The scholarship will be awarded to the eligible applicant who, in the opinion of the Selection Committee, is the most outstanding in combining high scholastic attainment and achievement in one or more areas such as service to the school and community; writing, drama, fine arts; debating in public speaking; sports. The winner of this scholarship who, in successive years of undergraduate courses maintains a 75% standing overall (or ranks in the top 10% of the year and faculty) will be eligible for renewals of $500 a year until graduation, not exceeding a total of five payments in all. A holder of this scholarship will not be precluded from enjoying the proceeds of other awards, however, a student may not simultaneously hold this scholarship and the Vancouver Sun Scholarship for Sun Carriers. The application must be accompanied by the Service certificate of the Vancouver Sun.

C. ENTRANCE AWARDS ADMINISTERED BY THE ASSOCIATION OF UNIVERSITIES AND COLLEGES OF CANADA

AUCC AWARDS — A number of entrance awards are administered by the Association of Universities and Colleges of Canada. Students are eligible to apply for awards by virtue of their parents' employment with the relevant donor companies. Awards are mainly tenable at institutions recognized by AUCC. The closing date for receipt of completed applications is June 1. The conditions regarding student averages vary for each scholarship; however, candidates must send results of the last two years of secondary school to the AUCC as soon as they are available.

Candidates should write for information directly to:
Awards Division, AUCC, 151 Slater Street, Ottawa, Ontario, K1P 5N1.
(613) 563-1236.

D. ENTRANCE AWARDS ADMINISTERED BY OTHER INSTITUTIONS AND ORGANIZATIONS

THE B.C. ASSOCIATION OF TEACHERS OF CLASSICS SCHOLARSHIP — An annual award of $100 will be given by the president of the University of Victoria to the leading student in British Columbia Latin 12 who registers at the University of Victoria for a first year course in Latin. An additional $50 will be given by the B.C. Association of Teachers of Classics. Application to compete should be made through the B.C.A.T.C. Scholarship Committee on forms available from: Mr. F.W. Robinson, President, B.C. Association of Teachers of Classics, 605-2151 West 39th Avenue, Vancouver, B.C. V6M 1T6.

CANADA SCHOLARSHIPS — The Government of Canada provides scholarships of $2,000 annually to students entering full time first year studies at a Canadian university or a university transfer program at a community college. Students must plan to undertake studies in one of the following eligible fields: Engineering, Applied Sciences, Mathematics, Physical Sciences, Agriculture, Biological Science. Canada Scholars must be Canadian citizens or permanent residents of Canada. Application forms are available at secondary schools.

COMINCO HIGHER EDUCATION AWARDS — Cominco Ltd. offers awards each year to the sons, daughters, or wards of a person who is regularly employed by Cominco, or of a widow whose husband died while regularly employed by Cominco or a Cominco pensioner or his widow to encourage students of good scholastic accomplishment to continue their education at an institution of higher learning beyond high school or senior secondary school. Cominco shall offer each year two classifications of awards to children of employees who are students enrolled in a high school or senior secondary school leaving course,

*Administered by the University of Victoria Foundation.

preparatory to attendance at an institution of higher education. Class I awards, in the amount of $500 each, shall be awarded to all students who make application and who have obtained an 86% or better standing, or corresponding letter grade, in their high school leaving course. Class II awards, in the amount of $350 each, shall be awarded to all students who make application and who have obtained an average in the 73% to 86% range, or corresponding letter grade, in their high school leaving course. Applicants for these awards must be planning to attend an accredited Canadian university or college to pursue any course of study which will lead to a recognized degree, or must be planning to attend a recognized junior or regional college, or must be planning to enroll at a recognized provincial institute of technology. In the case of the latter institutions, these must be accredited by or under the supervision of provincial departments of education and where the course of study would lead to a recognized diploma or certificate. Courses of study must be of at least two years duration and will not be applicable when a student would be in receipt of remuneration while also undertaking study. Complete details regarding eligibility as well as application forms may be obtained from: The Secretary, Scholarship and Education Awards Committee, Cominco Ltd., Trail, B.C. The application must be returned no later than September 15.

THE TERRY FOX HUMANITARIAN AWARDS — In keeping with the spirit of his achievements, the Terry Fox Humanitarian Award Program is intended to encourage Canadian youth to seek the high ideals represented by Terry Fox by the granting of commemorative scholarships for the pursuit of higher education. The Government of Canada has provided an initial $5 million endowment fund for this purpose.

The Terry Fox Scholarship is a renewable award, subject to satisfactory progress, and is tenable at any Canadian university or college. The value of each award is $3000 annually, for a maximum of four years or until a first degree is obtained. For candidates attending an educational institution in provinces where no tuition fee is applicable, the award value is $2000.

The awards will be of particular interest to graduating secondary level students and those currently studying towards a first degree or diploma in a Canadian university or college. Scholarship candidates must be Canadian citizens or have applied for citizenship at the time of award consideration. As many Scholarships will be granted each year as the number of creditable candidates who apply, with the total number awarded each year limited by the interest from the investment of the $5 million endowment. Candidates must qualify in the province or territory in which they are ordinarily resident. The field of study is open and at the discretion of the successful candidate.

Selection criteria for recipients will be based on demonstration of the highest ideals and qualities of citizenship and humanitarian service while in pursuit of excellence in their academic, amateur sport, fitness, health, community service and related endeavours. A Selection Committee will nominate deserving candidates to the corporation's Board of Directors. The Board is solely responsible for the final determination of successful candidates. Applications will be considered either directly or through academic institutions. Recommendations for scholarship assistance made by institutions will be an important factor in the final selection process.

The Board of Directors reserves the right to cancel any award before payment has been made where the candidate has failed to meet the conditions of this program. The tenure of the Scholarship is dependent upon the maintenance by the student of a standard of work and conduct which, in the opinion of the Board of Directors, justifies the Scholarship. For further information or scholarship application forms, please contact: Terry Fox Humanitarian Award Program, 711-151 Sparks Street, Ottawa, Ontario K1P 5E3. Deadline for submission of application is February 1.

DR. L.M. GREENE SCHOLARSHIP — This scholarship will be in the amount of $500 and is awarded annually to a former Prince Rupert Senior Secondary School student who is interested in pursuing a vocation in any of the Health Care fields. Application forms are available from The Administrator, Prince Rupert Regional Hospital, 1305 Summit Ave., Prince Rupert, B.C., V8J 2A6.

IMPERIAL OIL HIGHER EDUCATION AWARDS — Imperial Oil Limited offers annually free tuition and other compulsory fees to the children of employees and annuitants who proceed to higher education courses. Initial awards, or renewal of awards, are restricted to students under twenty-five years of age on the date of registration for any undergraduate year.

To qualify, a student must attain an average mark of 70% or higher in the appropriate secondary school examinations in the subjects required for admittance to the approved institution, or must have attained an average of 70% or more in a college year upon which application is based.

Courses may be taken at any Canadian university or other approved institutions of higher learning, and awards are tenable for a maximum of four academic years, or the equivalent, at the undergraduate or bachelor degree level. The four levels of academic years are measured from the first year of entering a postsecondary institution.

Further information and application forms may be obtained from The Secretary, Committee on Higher Education, Imperial Oil Limited, 111 St. Clair Avenue West, Toronto, Ontario M5K 1K3.

DR. R.G. LARGE SCHOLARSHIP — This scholarship is in the amount of $500 and is awarded annually to a former Prince Rupert Senior Secondary School student upon enrollment in a registered nursing program at either a Community College or University. Application forms are available from The Administrator, Prince Rupert Regional Hospital, 1305 Summit Ave., Prince Rupert, B.C., V8J 2A6.

TRANS-MOUNTAIN OIL PIPELINE CO. HIGHER EDUCATION AWARDS — Up to five Higher Education Awards will be offered annually by the Trans-Mountain Oil Pipeline Company to sons, daughters and legal wards of regular employees and annuitants, deceased employees, and deceased annuitants. To be eligible a student must attain a minimum standing of 70% in the appropriate secondary examination in the subjects required for admittance to approved institutions. Each award is tenable for a maximum of four academic years. Selection of winners will be made by The University of British Columbia from applicants who are entering a full program of studies at the University of Victoria, The University of British Columbia, Simon Fraser University, or the British Columbia Institute of Technology. The value of award payments shall equal the tuition and other compulsory fees for the academic year. No portion of an eligible fee which is paid by a government shall be included in the amount paid as awards by the company. Further information and application forms may be obtained from the Division Offices or the Personnel Dept. and forwarded to: The Trans-Mountain Higher Education Awards Committee, c/o The Royal Trust Company, P.O. Box 2031, Vancouver, B.C. V6B 3R7. Applications must be submitted by August 31.

THE UNIVERSITY OF VICTORIA SCIENCE FAIR AWARD — The President of the University will award $500 to the winner of the Senior Division of the Greater Victoria Regional Science Fair. The award is tenable only when and if the winner registers in a full program of studies at the University of Victoria.

VICTORIA MECHANICAL TRADE PROMOTION FUND SCHOLARSHIP — Provides a scholarship of three hundred dollars ($300) each year, based on academic standing only with no reference to financial status or income. The award is open to students entering first year at the University of Victoria. Applicants must be sons, daughters or legal dependents of members of the United Association of Plumbers and Steamfitters, Local 324, who are employed by firms who are contributors to the Victoria Mechanical Trade Promotion Funds as provided in the Collective Agreement. Applicants may also be sons, daughters or legal dependents of employers who employ members of the United Association of Plumbers and Steamfitters, Local 324 and who are contributors to the Victoria Mechanical Trade Promotion Fund. Further information may be obtained from Mr. E.M. McCaffery, Secretary Manager, B.C. Branch, Canadian Plumbing and Mechanical Contractors Association, 1128 West Georgia Street, Vancouver, B.C. V6E 3H9. Applications must be submitted by June 30.

VICTORIA WOMEN'S CANADIAN CLUB SCHOLARSHIPS — (1) One hundred and fifty dollars ($150) awarded to the female student attending a public high school in Greater Victoria School District (No. 61) who makes the highest standing in the B.C. Government Scholarship Examinations, and registering for a full year course in the University of Victoria or The University of British Columbia, the following September. (2) One hundred and fifty dollars ($150) awarded to the male student in Greater Victoria School District making the highest standing in the same examinations and under the same conditions. Should the student, in either case, be awarded a scholarship from any other source,

*Administered by the University of Victoria Foundation.

the Club Scholarship shall then revert to the student having the next highest standing. Correspondence concerning this award should be addressed to the Superintendent of School District 61.

THE ROYAL WESTMINSTER REGIMENT ASSOCIATION SCHOLARSHIPS — Two scholarships of $250 each, the gift of the Royal Westminster Regiment Association, will be awarded annually to worthy and deserving students who are continuing their formal education beyond secondary school in recognized institutions of higher learning in any place within Canada or outside Canada. To be eligible, applicants must be direct descendents, male or female, of a member of the Royal Westminster Regiment Association, or a member of the Royal Westminster Regiment CA (M) or one of those battalions which the Royal Westminster Regiment perpetuates, i.e., the 47th, 104th, or 131st. The scholarships are also open to applicants who are at the time of application serving members of the Royal Westminster Regiment. The applicants may be in their final year of secondary school or any year of postsecondary study, and may be resident in any place within Canada or outside Canada. The basis of the award will be academic standing in previous studies and need of financial assistance. The Application for Scholarship Form is obtainable from the Scholarship Committee. The Royal Westminster Regiment Association, Box 854, New Westminster, B.C. The cut-off date for application is July 31.

THE HON. W.C. WOODWARD UNIVERSITY MEMORIAL SCHOLARSHIPS — Offered in competition to sons, daughters, and legal dependents of regular full-time staff, regular part-time staff, eligible retired staff and certain deceased staff of Woodward Stores Limited and to be open to applicants (beginning University attendance for the first time) entering and taking a full course in any faculty leading to a first or undergraduate degree at the Universities of British Columbia, Victoria, Simon Fraser, Alberta, Calgary or Lethbridge. Candidates beginning (for the first time) a full course of study in University Transfer Programs at the following Colleges and Institutes of Technology may also qualify:

Colleges — (British Columbia) Camosun, Capilano, Cariboo, Douglas, Fraser Valley, Kwantlen, Langara, Malaspina, New Caledonia, North Island, Okanagan; (Alberta) Grant McEwan, Lethbridge Community, Mount Royal, Red Deer.

Institutes of Technology — British Columbia (BCIT), Northern Alberta (NAIT), Southern Alberta (SAIT).

The Scholarship Committee may, at its sole discretion, consider applications for attendance at institutions other than those listed, for the express purpose of pursuing a discipline not otherwise available.

Five scholarships are offered each year (limit of three in any one Province) each in the amount of $1000 a year. Scholarships are renewable annually (under specified conditions) at the beginning of each year of the undergraduate course within the same faculty, but subject to a maximum of five payments in all.

Each scholarship to be awarded on the basis of: (a) academic standing as given by the official grades assigned by the Ministry of Education to applicants on completion of high school in June: In B.C. only, the standing is assigned following completion of the Government Scholarship Examinations conducted by the Ministry of Education, (b) activity and interest in youth programmes, organizations and athletics within school and community, and (c) personal qualities, character and demonstration during the period of attendance at school, of citizenship, leadership, and service.

Applicants are to obtain special application forms from the Human Resources Office of any Woodward's Store, and are to submit the completed form together with an official transcript of the Secondary School record issued by the Ministry of Education of the Province, to Woodward's by July 15th of the year in which they propose to attend University, College or Institute of Technology. The transcript of the Government Scholarship Examination statement must also be submitted when applicable. If these transcripts are not available by July 15th, they must be forwarded by the student at the earliest possible date to the attention of Special Projects, Human Resources Dept., 51-0646, Woodward Stores Limited, 101 West Hastings St., Vancouver, B.C. V6B 1H4.

Applicants will be screened by the Scholarship Committee. Final choice of winners will be made by this Committee.

Winners will be announced as soon as possible after August.

Annual renewals will be made only to those who, in the opinion of the Scholarship Committee, have maintained good academic standing, and whose progress and conduct are considered satisfactory. A request for renewal must be filed each year by recipients of the Scholarship along with a copy of their University/College/Technical Institute transcript for the current year and a brief summary of other activities and commentary as appropriate.

Awards will be made and renewed only if, in the opinion of the Scholarship Committee, the candidates are of a sufficiently satisfactory standing.

SECTION 2

GOVERNMENT OF BRITISH COLUMBIA AWARDS

BRITISH COLUMBIA CULTURAL SERVICES SCHOLARSHIPS AWARDS — Currently under review. Students planning to attend recognized institutions in the cultural field should apply directly to the Coordinator, Arts Awards Programs, Cultural Services Branch, Ministry of Municipal Affairs, Recreation and Culture.

Assistance is available for the following disciplines and related arts: theatre (acting, directing, technical), music (performance, composition), visual arts and crafts, dance (performance, choreography), creative writing, museological and conservation studies, arts administration, and film and video.

Areas not recognized include: language study, fashion design, interior design, architecture, fine arts education or health programs, history of the arts, and general art appreciation.

Winter Study Awards

Junior Awards up to $1500 (for full time winter studies).
Senior Awards up to $2500 (for full time winter studies).

Assist study (mainly tuition) costs of outstanding and talented B.C. students pursuing serious training. Awards are paid, generally, to recognized and advanced schools, on behalf of the student.

Terms:

Junior Awards:

Available for a maximum of 4 years of full time study, up to and including 2nd year of a university or community college program;

Preference is given to students attending fine arts schools, colleges, universities and academies in British Columbia or other Canadian provinces.

Senior Awards:

Available for a maximum of 4 years of full time study for course work/programs after completion of 2nd year at university undergraduate or full time postgraduate degree, or professional diploma programs:

At recognized postsecondary institutions or academies without restriction of country/location.

Student must be majoring in a program and should be of first class ability and standing in all course work.

A portfolio must be submitted with the application.

General Information:

Preference is given to applicants who have resided in British Columbia for at least twelve months.

Applications are received once a year on or before June 30 for assistance in the following winter study season (September-June).

Three letters of reference (submitted on forms provided with application form) are required commenting on the applicant's talents, ability, potential, character or financial need.

A letter of acceptance from the institution the student will be attending.

A recent statement of academic grades to be provided by the student.

Information regarding all other scholarship assistance must be provided each year the student holds a scholarship.

All supporting documentation to the application form must be received in the CSB offices by July 15. If, for some reason, a document cannot be provided by that date, a letter outlining circumstances must accompany the application form.

Support in any given year cannot be regarded as a guarantee of similar support the year following. Each year's application form is considered on its merits.

Recipients of awards must advise the Coordinator, Arts Awards Program, in writing, of changes in their study intentions, place of study, etc.

Awards are not retroactive or applicable to past studies.

Current information and application forms are available in April each year for the June 30 application deadline. For more information contact: Coordinator, Arts Awards Program, Cultural Services Branch, Ministry of Municipal Affairs, Recreation and Culture, Parliament Buildings, Victoria, B.C. V8V 1X4, Phone: (604) 356-1728.

UNIVERSITY SPORTS AWARD PROGRAM

The Ministry of Universities, Science and Communications funds the University Sports Award Program. Athletes participating in the following varsity sports may be eligible: basketball (men and women), cross country (men and women), diving (men and women), field hockey (women), football (men), golf (men), gymnastics (men and women), ice hockey (men), rowing (men and women), rugby (men), skiing (men and women), soccer (men), swimming (men and women), track and field (men and women), volleyball (men and women) and wrestling (men).

The head of the athletic department is the person candidates should contact regarding eligibility within the University Sports Award Program. Eligible varsity athletes will be awarded $1400 each.

QUEEN ELIZABETH II BRITISH COLUMBIA CENTENNIAL SCHOLARSHIP

Currently under review. To commemorate the visit of Her Majesty Queen Elizabeth II to British Columbia in May of 1971, during the Centennial celebrations, the Government of the Province established the Queen Elizabeth II British Columbia Centennial Scholarship.

The scholarship is administered by the Chief of Protocol of the Province. An advisory Committee evaluates candidates for the scholarship and advises the Provincial Secretary and Minister of Government Services of its recommendations. The Advisory Committee consists of representatives of the Ministry of Provincial Secretary and Government Services, the Ministry of Education and each of the three public universities of the Province.

Number and value of scholarships — One major scholarship is available each year for study, commencing in the fall of that year. The scholarship has a total value of $20,000. Normally the scholarship will be awarded in the amount of $10,000 each year for two successive years of study, but the committee may, in exceptional circumstances, award the full sum of $20,000 for one year of study. In exceptional cases a scholarship winner who finds it necessary to undertake a third year of postgraduate study may apply during the second year of such studies for an additional scholarship of $10,000. In addition to the major scholarship, two minor scholarships of $4,000 each are available for the two top runnersup to the major winner each year.

Eligibility and tenability — The scholarship will be awarded each year on a competitive basis to a graduate of Simon Fraser University, the University of British Columbia, or the University of Victoria:

(a) who is a graduate of or graduates from a public university of British Columbia having attended that or another British Columbia public university for a minimum of two years;
(b) whose domicile or ordinary residence is in the Province;
(c) who is a Canadian citizen;
(d) who, in the opinion of the Advisory Committee, is a person of unusual worth and promise and qualifies under the regulations; and
(e) who proposes to conduct the studies for which the scholarship is awarded at an institution in the United Kingdom.

Basis of selection — The Advisory Committee will make its recommendations on the basis of academic achievement, demonstrated aptitudes, personal qualities and character, interest and participation in university and community affairs, and proposed programs of study.

Successful candidates — A successful candidate shall:

(a) follow the proposed program of study outlined in the application. If a candidate wishes to follow an alternative program of studies the candidate shall apply to the Advisory Committee for approval of that program;
(b) obtain admission to an institution in the United Kingdom equivalent to a faculty of graduate studies at a Canadian university;
(c) maintain a satisfactory standing as required by the institution attended; and
(d) submit a progress report, including any final grades that are available every six months for the duration of the period of studies.

Payment of scholarships — The major scholarship shall be paid in four or six equal sums, as the case may be, at each September and January from the commencement of studies. The minor scholarships shall be paid in two equal sums, one at the commencement of each academic year of studies.

Submission of application — All inquiries, applications and documents pertaining to this Scholarship must be forwarded directly to:

The Chief of Protocol,
Ministry of Provincial Secretary and Government Services,
Parliament Buildings,
Victoria, B.C., V8V 1X4
(Area code 604 387-4376)

Applications must be forwarded postmarked not later than January 15 in the year for which the scholarship is being offered. Documents and applications which cannot be returned, become the property of the Advisory Committee.

Documents to be submitted —

1. Each applicant must arrange for official transcripts of his postsecondary academic record to be forwarded directly to the Chief of Protocol from the registrars of the institutions concerned.

2. Each applicant must arrange for at least three letters of reference which must be forwarded directly from the persons writing them. At least two of the letters of reference must be from persons who have taught the applicant at the undergraduate level.

3. Each applicant must complete the application form and forward it, along with a letter which includes

(a) interest and participation in college and community affairs;
(b) special achievements and hobbies;
(c) proposed program of studies, including the name of the institution to be attended;
(d) future career plans; and
(e) any further information which the applicant feels is relevant to the application.

SECTION 3

UNDERGRADUATE AWARDS FOR WHICH NO APPLICATION IS NECESSARY

The awards listed in this section are open only to students who attend the University of Victoria in the regular Winter Session specified in this calendar. They are awarded automatically on the basis of merit or on nomination by departments and applications from students are not required unless otherwise indicated. Except where the terms and conditions of an undergraduate award specifically state otherwise, award winners must normally return to the University of Victoria in the next winter session and enroll in a full program. Deferral of an award for up to one year (except Faculty of Law, where up to two years may be permitted) may be granted on written application to the Senate Committee on Awards. Students who enroll in a full program and subsequently withdraw from courses, so that they fall below 15 units, will have the value of their award reduced accordingly, if the amount exceeds their assessed fees, and should note that they will only be eligible for part time awards in the following year.

For Heads of the Graduating Classes

GOVERNOR GENERAL'S SILVER MEDAL — The Governor General's Silver medal is awarded annually to the candidate for a bachelor's degree who stands at the head of the graduating class on the basis of graduating average.

THE UNIVERSITY OF VICTORIA JUBILEE MEDAL — This medal is awarded to the student in the Faculty of Arts and Science registered for the B.A. or B.Sc. degree who stands at the head of the graduating class on the basis of the graduating average, unless that student is awarded the Governor General's Silver medal. In this case the University of Victoria Jubilee medal is awarded to the student who stands at the head of the graduating class on the basis of the graduating average in the other degree category. The award was established by the 1978 graduating class in recognition of the University's Jubilee year.

DR. MAXWELL A. CAMERON MEMORIAL MEDALS AND PRIZES — The British Columbia Teachers' Federation annually offers a silver medal and a prize to the student completing the final year of the B.Ed. degree (secondary program), who achieves the highest standing in general proficiency with a first class standing in practice teaching. A similar award is made to a student in the B.Ed. elementary program. Selection of the students is left to the Faculty of Education, University of Victoria.

THE CANADIAN SOCIETY OF ELECTRICAL ENGINEERING MEDAL — Awarded to the student in the Faculty of Engineering, registered for a B.Eng. degree, in either the Electrical or Computer Engineering programs, who stands at the head of the class on the basis of a grade point average calculated on the 30 units of 300 and 400 level course work yielding the highest average.

THE CANADIAN SOCIETY OF MECHANICAL ENGINEERING MEDAL — Awarded to the student in the Faculty of Engineering, registered for a B.Eng. degree, in the Mechanical Engineering program, who stands at the head of the class on the basis of a grade point average calculated on the 30 units of 300 and 400 level course work yielding the highest average.

THE LAW SOCIETY GOLD MEDAL AND PRIZE — A gold medal, presented by the Law Society of British Columbia, will be awarded to the student obtaining the highest aggregate marks in the three years of study in the Faculty of Law. In addition, the Society will pay the student's Call and Admission Fee.

THE WILLIAM R. McINTYRE MEDAL — The William McIntyre Medal is presented annually to a member of the graduating class who, in the opinion of the Faculty, has exhibited the highest qualities of community service, student leadership and academic excellence over the course of the LL.B. program in the Faculty. The medal recognizes the very special relationship that the Faculty of Law has enjoyed with the Honourable William R. McIntyre, who retired from the Supreme Court of Canada in 1989.

* VICTORIA MEDAL — A silver medal presented by Professor S.W. Jackman in memory of Edward Tatton Anfield will be awarded annually to the candidate in the Faculty of Fine Arts, registered for a B.A., B.F.A. or B.Mus. degree, who stands at the head of the graduating class on the basis of the graduating average.

Undergraduate Awards — General

* THE J. ALAN BAKER MEMORIAL SCHOLARSHIP — An award of $250 is made annually to a deserving and promising student in an Honours program who is continuing into third or fourth year at the University of Victoria. Selection will be made by the Senate Committee on Awards.

* THE BRITISH COLUMBIA 1958 CENTENNIAL SCHOLARSHIP — One thousand two hundred dollars ($1,200) to be awarded annually to a student who has completed at least one year at the University of Victoria and who is continuing University studies in the Province of British Columbia. The award will be made on the basis of scholastic achievement and effective participation in campus activities.

* THE JAMES R. BULLICK MEMORIAL SCHOLARSHIPS — Two scholarships of $1750 each are awarded annually to outstanding students entering one of the final two years of undergraduate studies. One scholarship will be awarded in the Faculty of Engineering and one in the Faculty of Arts and Science.

* R.G. & I.M. CARLEY SCHOLARSHIP — A scholarship of $TBA is awarded annually to a student with high academic standing. Selection of the recipient will be made by the Senate Committee on Awards.

* MARY HANNAH COOPER SCHOLARSHIP FUND — An annual award of seven hundred dollars ($700) will be made to a worthy and deserving student. The selection will be made by the Senate Committee on Awards.

* MATTHEW COWAN ANNUAL SCHOLARSHIP — Three hundred dollars ($300) awarded annually to a promising student with high academic standing. The winner must continue at the University of Victoria.

PERCY H. ELLIOTT MEMORIAL SCHOLARSHIP — Eight hundred dollars ($800) awarded to a student of outstanding merit and promise in one specific field of study, who has also a high general academic standing and qualities of character indicating worthiness to hold the scholarship. The scholarship is awarded, upon the recommendation of the Senate Committee on Awards, to a student in the first or second year, proceeding immediately towards a degree.

* THE ROBERT S. EVANS MEMORIAL SCHOLARSHIPS — Nine scholarships of one thousand dollars ($1000) will be awarded annually to academically outstanding students who intend to continue their studies at the University of Victoria as follows:

(a) One scholarship to a student in each of the Programs: Child and Youth Care, Nursing, and Social Work, on the recommendation of the respective Directors:
(b) One scholarship to a student who has completed Year III in an Astronomy program;
(c) Five scholarships for award within the student body at large.

If no suitable candidates can be found in categories (a) or (b), additional awards can be made in category (c).

* THE FRANK AND MARGARET GIBBS SCHOLARSHIPS — Scholarship of up to three hundred dollars ($300) each will be awarded in Arts, Science, Fine Arts and Education, on the basis of distinction in scholarship. Award winners must continue academic work at an approved university.

* THE NELLIE GILLESPIE PRIZE — A prize of $TBA is awarded annually to the student who upon graduation with a bachelor's degree stands at the head of the graduating class on the basis of the graduating average. Selection will be made by the Senate Committee on Awards.

THE DAME MINITA GORDON SCHOLARSHIP — An award of $5,000 is made annually to a student from Belize, who is enrolled or planning to enroll at the University of Victoria. The award is renewable for up to four years or until a first degree is achieved. The recipient's tuition, Students' Society, athletic and other incidental University fees will be covered by the University. Selection of the recipient is made by the Senate Committee on Awards on the recommendation of a Belize nominating committee. Renewal of the award will be based upon satisfactory performance as determined by the Senate Committee on Awards.

KIWANIS SCHOLARSHIP — Five hundred dollars ($500) awarded to a student completing the first year and entering the second year at University of Victoria. Selection of the recipient to be made by the Senate Committee on Awards in conference with the Kiwanis Club of Victoria.

* THE HAZEL T. KNOX MEMORIAL SCHOLARSHIP — Two awards of five hundred dollars ($500) awarded annually to deserving and promising students in an honours program and continuing into the third or fourth year at the University of Victoria. If funds permit, additional awards of a similar nature will be made by the Senate Committee on Awards.

* THE GARETH LINEEN MEMORIAL SCHOLARSHIP — A scholarship of $500 will be awarded annually to an undergraduate student who has completed one year in the Novice Rowing Program. The recipient will have achieved high academic standing and have shown outstanding potential in the Rowing Program. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Rowing Coaching Staff and the Athletics Department.

THE HOWARD PETCH SCHOLARSHIPS — Eight scholarships, each with a maximum value of $5000, will be awarded annually. The scholarships will be awarded to the student entering second, third, fourth or fifth year who achieves the highest academic standing in each of the Faculties of Education, Engineering, Human and Social Development, Fine Arts, and Law, and in the Divisions of Humanities, Science, and Social Science, in the Faculty of Arts and Science. The measure of academic standing will be grade point average on a full time course load (normally 15 units) taken in the preceding two academic terms. In the

*Administered by the University of Victoria Foundation.

event of a tie, the scholarship will be shared. The selection of the recipients will be made by the Senate Committee on Awards.

THE PRATT-SHORT MEMORIAL SCHOLARSHIP — Five hundred dollars ($500) awarded annually to a student with broad interests completing second year.

THE PRESIDENT'S SCHOLARSHIPS — A number of scholarships will be awarded annually by the Senate Committee on Awards. The awards will be made in Arts and Science, Education, Engineering, Fine Arts, and Human and Social Development on the basis of scholarship. Awards will be made to approximately the top 3% of full time students (15 units) in each of the named faculties. The value of the awards will vary in relation to the dollar value of other awards administered by the University of Victoria that the students receive. Award winners must normally return to the University of Victoria in the next winter session and enroll in a full program. Deferral of an award for up to one year (except Faculty of Law, where up to two years may be permitted) may be granted on written application to the Senate Committee on Awards. Students who enroll in a full program and subsequently withdraw from courses, so that they fall below 15 units, will have the value of their award reduced accordingly, if the amount exceeds their assessed fees, and should note that they will only be eligible for part time awards in the following year.

THE PRESIDENT'S SCHOLARSHIPS FOR PART TIME UNDERGRADUATE STUDENTS — A number of scholarships will be awarded annually by the Senate Committee on Awards to approximately the top 3% of students registered in between 9.0 and 14.9 units in any combination of two terms in the twelve month period from May through April. All work taken in the year will be considered in determining the award winners. The awards will be made in Arts and Science, Education, Engineering, Fine Arts and Human and Social Development on the basis of scholarship. The value of the awards will vary in relation to the dollar value of other awards administered by the University of Victoria that the students receive. Award winners must return to the University of Victoria for further undergraduate credit work within twelve months.

* THE EDWARD J. SAVANNAH MEMORIAL SCHOLARSHIP — Seven hundred dollars ($700), subscribed by his friends and former students, to be awarded annually to students proceeding to third year science at the University of Victoria or elsewhere.

* THE DARRYL SMITH MEMORIAL SCHOLARSHIP — A scholarship of $500 will be awarded annually to an undergraduate student who has completed one year in the Novice Rowing Program. The recipient will have achieved high academic standing and have shown outstanding potential in the Rowing Program. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Rowing Coaching Staff and the Athletics Department.

UNIVERSITY EXTENSION ASSOCIATION OF VICTORIA SCHOLARSHIP — Three hundred dollars ($300) to be awarded to a worthy and promising student who is returning to the University of Victoria in the following year.

THE UNIVERSITY OF VICTORIA FACULTY SCHOLARSHIPS — approximately 60 scholarships of $500 are awarded annually on the basis of academic standing. The fund for these awards was established by donations of University of Victoria faculty members and professional librarians. Selection of the recipients will be made by the Senate Committee on Awards.

THE UNIVERSITY OF VICTORIA FACULTY ASSOCIATION SCHOLARSHIP
— Three scholarships, of six hundred dollars ($600) each, to be awarded annually to further the education of students of good academic standing.

UNIVERSITY WOMEN'S CLUB SCHOLARSHIP — Seven hundred and fifty dollars ($750) awarded to the woman student taking the highest standing in her first year of Arts and Science, and continuing her course in the second year at the University of Victoria or at any other university, provided the course desired is not available at this University. When a student wishes to attend a university outside Canada, the reasons for such attendance should be submitted to the Scholarship and Bursary Society of the University Women's Club for approval.

THE VICTORIA COUNCIL, UNITED COMMERCIAL TRAVELLERS OF AMERICA SCHOLARSHIP — Two hundred dollars ($200) awarded annually to the leading student of the Humanities in the second year. The winner must continue university studies.

* THE R.T. WALLACE COMMEMORATIVE SCHOLARSHIP — Five scholarships of $1,850 each are awarded annually to outstanding students entering one of the final two years of undergraduate studies of the faculties of Education, Fine Arts and Human and Social Development; two scholarships will be awarded in the Faculty of Arts and Science — one to a student enrolled in a B.A. program and one to a student enrolled in a B.Sc. program.

* THE WESTAD SCHOLARSHIP — This scholarship of five hundred and twenty-five dollars ($525) is awarded annually to a deserving student completing first or second year and continuing University studies.

* THE WOODS TRUST SCHOLARSHIP — Awarded annually to promising students at the University of Victoria who intended to pursue studies as undergraduates at the university or as postgraduate students at other universities or educational institutions or at any industrial or commercial concern engaged in the field of electrical engineering or in any allied field in the physical sciences. The scholarships are valued at five hundred dollars ($500) each.

Undergraduate Awards Listed by Course or Area of Study

Anthropology

* THE GRAND POST OF THE NATIVE SONS OF B.C. — BRUCE McKELVIE SCHOLARSHIP — Five hundred dollars ($500) to be awarded annually to a third year Anthropology student with the highest standing in a course relating to Anthropology in B.C. The student must be a Canadian citizen and must return to the University of Victoria in the next regular session.

* THE PETT AWARD IN ARCHAEOLOGY — A scholarship of five hundred and fifty dollars ($550) will be awarded annually to a student who is a Canadian citizen and who has successfully completed at least one course in Archaeology at the University of Victoria, in order to assist the recipient to do field or laboratory work in British Columbia archaeology. The selection will be made by the Senate Committee on Awards upon the recommendation of the senior instructor in Archaeology in the Department of Anthropology.

Astronomy

* THE ROBERT S. EVANS MEMORIAL SCHOLARSHIPS — Nine scholarships of one thousand dollars ($1000) will be awarded annually to academically outstanding students who intend to continue their studies at the University of Victoria as follows:

(a) One scholarship to a student in each of the Programs: Child Care, Nursing, and Social Work, on the recommendation of the respective Directors;
(b) One scholarship to a student who has completed Year III in an Astronomy program;
(c) Five scholarships for award within the student body at large.

If no suitable candidates can be found in categories (a) or (b), additional awards can be made in category (c).

THE DON INGHAM MEMORIAL SCHOLARSHIP — This scholarship of $400 is awarded annually by the Victoria Newspaper Guild, Local 223, A.N.G., in memory of Don Ingham, widely known journalist and amateur astronomer. The scholarship will be awarded to the top student in Astronomy 200A/B, who is returning to the University of Victoria and planning to take further courses in Astronomy.

THE VICTORIA CENTRE OF THE ROYAL ASTRONOMICAL SOCIETY OF CANADA BOOK PRIZE — A book prize up to the value of $75, selected by the recipient, will be awarded annually to the student graduating with an Honours B.Sc. in Astronomy, with the highest graduating average, provided that this is at least a first class average. The recipient will be selected by the Senate Committee on Awards upon the recommendation of the appropriate faculty member in the Department of Physics.

Biochemistry and Microbiology

THE TERRY FOX SCHOLARSHIP — An award of $1000 is made annually by the Victoria Real Estate Board to an outstanding student who is in the third year of a program of Biochemistry and Microbiology and who has indicated an interest in the area of cancer research. This award is also tenable at a medical school. Selection will be made by the

*Administered by the University of Victoria Foundation.

Senate Committee on Awards upon the recommendation of the Department of Biochemistry and Microbiology.

* THE CHARLES HUMPHREY MEMORIAL SCHOLARSHIP IN MICROBIOLOGY — An award of $2500 is made annually to an outstanding student proceeding to year 3 or 4 of an Honours or Major program. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Department of Biochemistry and Microbiology.

ISLAND MEDICAL LABORATORIES BOOK PRIZE IN BIOCHEMISTRY — A book prize is presented annually to the most outstanding student enrolled in 200 level courses in Biochemistry. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Department of Biochemistry and Microbiology.

THE MOLSON COMPANIES SCHOLARSHIPS — A scholarship of five hundred dollars ($500), one in each of the departments of Chemistry, Physics, and Biochemistry/Microbiology, is awarded annually to an outstanding student completing year three in a major or honours program. Preference will be given students who have indicated an interest in the business or scientific aspects of the brewing industry. Selection of each recipient will be made by the Senate Committee on Awards upon the recommendation of the department involved.

Biology

B.C. HYDRO SCHOLARSHIPS — B.C. Hydro is establishing five scholarships of $500 each to encourage the development of knowledge and expertise in subjects related to environmental impact assessment work within the context of the British Columbia environment. The scholarships are awarded annually to outstanding students entering year 3 or 4 of the following programs: Biology (1 award), Geography (1 award) and Environmental Studies (3 awards). The Geography recipient must be specializing in Techniques and Methods and/or Resources and Physical courses; the Environmental Studies recipients must be registered in the major program with an emphasis on natural resource management or science areas. Selection of the recipients will be made by the Senate Committee on Awards upon the recommendations of the Departments and Program involved.

* SHEILA CALVERT MEMORIAL SCHOLARSHIP — A scholarship of $500 is awarded to a student entering the third or fourth year in Biology. Selection will be made by the Senate Committee on Awards upon the recommendation of the Department of Biology.

* THE CHAPMAN MEMORIAL SCHOLARSHIP — Two scholarships of $750 each will be awarded annually, one to a student who has completed third year Biology, on the Ecology Program, and one to a student who has completed third year Geography, on the Resources and Physical Program. A book on ecology and conservation, selected by the appropriate department, will be part of the award. These scholarships are given in memory of John Chapman and his daughter Barbara who were well known conservationists. Selection will be made by the Senate Committee on Awards upon the recommendations of the appropriate departments.

* JOHN J. DOBROCKY SCHOLARSHIP — A scholarship of $1000 is awarded annually to a student entering fouth year who is specializing in any aspect of oceanography or related marine sciences and who has demonstrated outstanding potential for a professional career in the discipline. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Department of Biology.

* THE SINCLAIR FARRIS AWARD — An award of $450 is made annually to an undergraduate or graduate student in Biology for interest and achievement of excellence in the field of microtechnique. The award was established to recognize Sinclair Farris who worked with the Canadian Forestry Service (Environment Canada) for 38 years, specializing in microtechnique. Selection will be made upon the recommendation of the Department of Biology by the Senate Committee on Awards in the case of an undergraduate student and by the Awards Committee of the Faculty of Graduate Studies in the case of a graduate student.

* FREEMAN F. KING SCHOLARSHIP — Six hundred and fifty dollars ($650) awarded to a student entering third or fourth year, preferably the latter, and preparing for a career in natural history, considered in a broad demonstrated interest in field studies, especially in terrestrial biology. The recipient will be selected by the Senate Committee on Awards from candidates recommended by Biology Department staff members.

* THE AMELIA LEITH MEMORIAL SCHOLARSHIP — An award of $700 is made annually to an outstanding student who is completing year 2 or 3 of a major or honours program in Biology and who has an interest in horticultural studies. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Department of Biology.

* THE IAN AND JOYCE McTAGGART-COWAN SCHOLARSHIP — An award of $1,900 is made annually to an outstanding student proceeding to year 3 or 4 of an Honours program in Biology. Selection of the recipients will be made by the Senate Committee on Awards upon the recommendation of the Department of Biology.

* THE MELBURN-BRENTON SCHOLARSHIP — An award of $1450 is made annually to a student, with high standing, whose special interest is cryptogamic botany. Selection will be made by the Senate Committee on Awards (or the Graduate Studies Awards Committee, if appropriate) upon the recommendation of the Department of Biology.

* B.W. PEARSE SCIENCE SCHOLARSHIP — Four scholarships of four hundred dollars ($400) each will be awarded to the top year student enrolled in an honours course in Biology, Chemistry, Mathematics and Physics.

SEASPAN INTERNATIONAL LTD. SCHOLARSHIP — One hundred and fifty dollars ($150) awarded annually to the student leading courses numbered 200 in any two of the following departments: Biology, Chemistry, Geography, Mathematics, Physics. The winner must continue academic work at an approved university.

* THE THETIS PARK NATURE SANCTUARY ASSOCIATION SCHOLARSHIP — An award of $650 is made annually to an undergraduate student, with high standing, whose main interest is plant taxonomy. Selection will be made by the Senate Committee on Awards upon the recommendation of the Department of Biology.

THE JOHN TRELAWNY SCHOLARSHIP — A scholarship of $600 is awarded annually to an outstanding 2nd or 3rd year Biology student in the area of Plant Science. The scholarship is funded by the royalties from the book, *Wild Flowers of the Yukon and Alaska,* by John S. Trelawny. The winner is selected by the Senate Committee on Awards upon the recommendation of the Department of Biology.

VICTORIA CENTRAL LIONS CLUB — DR. G.C. CARL AWARD — Five hundred dollars ($500) awarded annually to the top first year student in the Department of Biology who is continuing similar studies at the University of Victoria.

THE VICTORIA MEN'S GARDEN CLUB SCHOLARSHIP — Three hundred ($300) awarded annually to a third year student in Botany on the basis of academic attainment. The award is to be made on the recommendation of the Department of Biology.

VICTORIA NATURAL HISTORY SOCIETY SCHOLARSHIP — Five hundred dollars ($500) awarded to the most deserving student completing first or second year, specializing in Biology, and having demonstrated interest in natural history.

Business

HONDA CITY SCHOLARSHIP IN BUSINESS — An annual scholarship equal to the amount of full tuition fees during the winter session will be awarded to a full time student entering the Business Program in the second year of university studies with an outstanding academic record in the first year of university studies. Selection of the recipient will be made by the Senate Committee on Awards upon recommendation of the School of Business.

LIBER ERO FOUNDATION SCHOLARSHIPS — A scholarship of $4000 will be awarded annually to a student entering the first year of the Business Program (second year of university studies). The scholarship is renewable, subject to an acceptable level of academic performance, for three years or until the Bachelor of Commerce degree is obtained. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the School of Business.

Chemistry

* THE CHARLES HUMPHREY MEMORIAL SCHOLARSHIP IN

*Administered by the University of Victoria Foundation.

CHEMISTRY — An award of $2500 is made annually to an outstanding student proceeding to year 3 or 4 of an Honours or Major program. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Department of Chemistry.

THE MOLSON COMPANIES SCHOLARSHIPS — A scholarship of five hundred dollars ($500), one in each of the departments of Chemistry, Physics, and Biochemistry/Microbiology, is awarded annually to an outstanding student completing year three in a major or honours program. Preference will be given to students who have indicated an interest in the business or scientific aspects of the brewing industry. Selection of each recipient will be made by the Senate Committee on Awards upon the recommendation of the department involved.

* B.W. PEARSE SCIENCE SCHOLARSHIPS — Four scholarships of four hundred ($400) awarded to the top year student enrolled in an honours course in Biology, Chemistry, Mathematics and Physics.

* THE JOHN F. REEVES MEMORIAL FUND — The award of $950 will be offered annually to the student in the Chemistry Coop Program who, during a work term, is judged to have made the most outstanding contribution to the student's employer in the field of chemistry. The recipient of the award should clearly have demonstrated some distinction in work term performance. Candidates must be nominated for the award by their employer and the nominations will be assessed by a committee composed of two representatives of employers participating in the Chemistry Coop Program chosen by the Chemistry Department and two members of the Chemistry Department. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the committee. The requirement that the award winner must return to the University of Victoria in the next regular session and must enroll in a full program does not apply to this award.

THE RETECH AWARD — Two awards of $100 each will be offered in each 4 month work term period to the two students who have been judged to have the best all round performance in the Chemistry Coop work terms of the given period. One junior (work term 1 or 2) and one senior (work term 3 or higher) will be chosen. Assessment will be made by the Chemistry Coop Committee and will be based on workterm reports, oral presentations and performance on the job. Selection will be made by the Senate Committee on Awards upon the recommendation of the Chemistry Coop Committee. The requirement that the award winners must return to the University of Victoria in the next regular session and must enroll in a full program, does not apply to this award.

* THE STEPHEN A. RYCE MEMORIAL SCHOLARSHIP — A scholarship of $375 will be awarded annually to an outstanding student in third year Chemistry who plans to complete a degree in Chemistry at the University of Victoria. Selections of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Awards Committee of the Department of Chemistry. The award is in memory of Dr. Stephen A. Ryce who was a member of the Chemistry Department for many years.

SEASPAN INTERNATIONAL LTD. SCHOLARSHIP — One hundred and fifty dollars ($150) awarded annually to the student leading courses numbered 200 in any two of the following departments: Biology, Chemistry, Geography, Mathematics, Physics. The winner must continue academic work at an approved university.

Child and Youth Care

B.C. CHILD AND YOUTH CARE ASSOCIATION AWARD — One year's free membership in the Association is awarded annually to a graduating student who has demonstrated proficiency in practica and has made significant contributions to the Association's activities. Selection of the recipient will be made by the School of Child and Youth Care and the Association's Victoria Region Executive.

* THE CHUCK CURTIS MEMORIAL AWARD — An award of $2000 is given annually to a student proceeding to year three or four of the Child and Youth Care program who shows professional promise as indicated by excellence in Child and Youth Care practice (e.g. high achievement in practica coursework, notable contribution in volunteer/community involvement). Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the School of Child and Youth Care in consultation with the Professional Advisory Committee.

* THE ROBERT S. EVANS MEMORIAL SCHOLARSHIPS — Nine scholarships of one thousand dollars ($1000) will be awarded annually to academically outstanding students who intend to continue their studies at the University of Victoria, as follows:

(a) One scholarship to a student in each of the Programs: Child and Youth Care, Nursing, and Social Work, on the recommendation of the respective Directors;
(b) One scholarship to a student who has completed Year III in an Astronomy Program;
(c) Five scholarships for award within the student body at large.

If no suitable candidates can be found in categories (a) or (b), additional awards can be made in category (c).

* THE WILLIAM AND GLADYS PARTRIDGE AWARD — An award of $150 is made annually to the graduating student in the School of Child and Youth Care who submits the best essay offering an original contribution to the theory or practice of child care. Essays must be submitted no later than April 30. If no essay reaches the required standard the award will be withheld. Selection of the recipient will be made upon the recommendation of the Director of the School of Child and Youth Care.

THE JEAN WHITE MEMORIAL SCHOLARSHIP — A scholarship of $400 is awarded annually to a student entering second year in the School of Child and Youth Care who is pursuing a career in a health related field and has demonstrated an exceptional commitment to the community through volunteer service. This award has been established by the Queen Alexandra Solarium for Crippled Children Society in memory of the late Mrs. Jean White, Coordinator of Volunteers, who devoted her life to children. Selection of the recipient will be made by the Senate Committee on Awards upon the joint recommendation of the School of Child and Youth Care and the Board of Trustees of the Queen Alexandra Crippled Children Society.

Classics

* THE CATRIONA CAMERON BINGHAM PRIZE — A prize in memory of Catriona Cameron Bingham is awarded annually to an outstanding student in a beginning course in classical Greek. Preference will normally be given to a mature student. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Department of Classics.

* THE GEORGE P. BLACK MEMORIAL SCHOLARSHIP — A scholarship of $850 will be awarded annually to an outstanding undergraduate student in Classics, in memory of George P. Black, who was for 22 years an exceptional teacher of Latin and Greek at Victoria College. The recipient will be selected by the Senate Committee on Awards, upon the recommendation of the Department of Classics.

CLASSICAL ASSOCIATION OF VANCOUVER ISLAND BOOK PRIZES — Three or more prizes will be awarded annually by the Classical Association of Vancouver Island for excellence in the study of Classics. Selection will be made by the Senate Committee on Awards on the recommendation of the Department of Classics.

* THE EDWARD B. PAUL MEMORIAL SCHOLARSHIP — A scholarship of $500 will be awarded annually to an outstanding undergradaute student in Classics. The winner is selected by the Senate Committee on Awards upon the recommendation of the Department of Classics.

Computer Science

DIGITAL EQUIPMENT OF CANADA LIMITED AWARD OF MERIT — An award of $250 and a certificate of merit is made annually to a student who is entering fourth year, is registered in a Major or Honours Computer Science program (including a combined program) and has achieved the highest overall standing in the required third year Computer Science courses. In the case of a tie in the standing the Department will recommend a recipient. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Department of Computer Science.

HTS HI-TECH SYSTEMS LIMITED SCHOLARSHIP — HTS Hi-Tech Systems Ltd. offers a scholarship of $750 to a student entering second, third or fourth year in a Computer Science program, who has achieved high academic standing. Selection of the recipient will be made by the Senate Committee on Awards upon the recomendation of the Department of Computer Science.

* THE JOHN THIPTHORPE MEMORIAL AWARD — An award of at least $200 is made annually to a student entering third year in an undergraduate program of Computer Science. The award will be based

*Administered by the University of Victoria Foundation.

on the student's academic achievement exhibited in the second year courses. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Department of Computer Science.

Creative Writing

* THE MILLEN UNDERGRADUATE AWARD — Two $1,500 scholarships may be made annually to students entering Year III and Year IV in Creative Writing. Selection of the candidates will be based on high academic standing and an assessment by the Department of Creative Writing of:
(a) an original lyric poem, beautiful in form and content, or
(b) a prose original, fact or fiction, of not more than thirty-five hundred words, which is beautiful in form and content.
Submission of original writings must be made according to the format and entry dates prescribed by the Department of Creative Writing. Selection of the recipients will be made by the Senate Committee on Awards based upon the recommendation of the Department of Creative Writing.

*THE ROSALIND HULET PETCH MEMORIAL SCHOLARSHIP IN CREATIVE WRITING — Five hundred dollars ($500) to be awarded annually to an outstanding student in Creative Writing who is continuing studies at the University of Victoria. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Department of Creative Writing.

Economics

THE ASSOCIATION OF PROFESSIONAL ECONOMISTS OF BRITISH COLUMBIA SCHOLARSHIP — The Association provides a scholarship of $750 to encourage students to pursue careers as professional economists. It is awarded to an outstanding student in Economics entering the final year of a Major or Honours program in Economics. Selection will be made by the Senate Committee on Awards upon the recommendation of the Department of Economics.

THE DR. LEO BAKONY MEMORIAL SCHOLARSHIP — A scholarship of $500 is awarded annually to a student entering year four of a Major or Honours B.Sc. in Economics. Selection will be based on academic performance in courses that fulfill the statistics requirements for the degree. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Department of Economics.

THE EATON FOUNDATION SCHOLARSHIP IN MARKETING — A scholarship of five hundred dollars ($500), the gift of the Eaton Foundation, will be available annually to the third year student who, in the opinion of the Department of Economics, is most proficient in the study of consumer behaviour under competitive market conditions. Selection will be made by the Senate Committee on Awards upon the recommendation of the Department of Economics, to a student with a first class average.

* THE GEORGE HAMILTON HARMAN MEMORIAL SCHOLARSHIPS — Two scholarships of three hundred and twenty-five dollars ($325) each, made available by Miss Emily A. Harman of Toronto in memory of her late brother, will be awarded for proficiency in money and banking or in Economics.

THE INSTITUTE OF CHARTERED ACCOUNTANTS OF BRITISH COLUMBIA PRIZE — An award of $750 is made annually to the outstanding student completing the accounting course, Commerce 253, Financial Accounting.

THE VANCOUVER STOCK EXCHANGE SCHOLARSHIP — An award of $1000 is made annually to an outstanding student proceeding to year 4 of a Major or Honours program in Economics. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Department of Economics.

YORKSHIRE TRUST COMPANY SCHOLARSHIP — Two hundred dollars ($200) is awarded annually to the outstanding student in Commerce 253, Financial Accounting, who plans to continue University studies leading to a B.Com. degree.

Education

See Section 4. Applications are now required for all Education awards.

Engineering

ASSOCIATION OF PROFESSIONAL ENGINEERS OF BRITISH COLUMBIA ACHIEVEMENT AWARD — The Association of Professional Engineers of British Columbia annually offers an Achievement Award Plaque to a member of the graduating class of the Faculty of Engineering who shows great promise in each program of the B.Eng. degree program. The recipients will be selected by the Senate Committee on Awards upon the recommendation of the Faculty of Engineering.

ASSOCIATION OF PROFESSIONAL ENGINEERS OF BRITISH COLUMBIA PROFICIENCY PRIZE PLAQUE — The Association of Professional Engineers of British Columbia annually offers a Proficiency Prize Plaque to the student in the Faculty of Engineering registered for the B. Eng. degree who stands at the head of the graduating class. The recipient will be selected by the Senate Committee on Awards upon the recommendation of the Faculty of Engineering.

ASSOCIATION OF PROFESSIONAL ENGINEERS OF BRITISH COLUMBIA SCHOLARSHIP — A scholarship of $1000 will be awarded annually to a student entering the second year of Engineering at the University of Victoria. The selection will be based upon performance during the first year of Engineering at a British Columbia university or community college. The recipient will be selected by the Senate Committee on Awards upon the recommendation of the Faculty of Engineering.

* THE VICTORIA BRANCH, ASSOCIATION OF PROFESSIONAL ENGINEERS OF B.C. SCHOLARSHIP — An award of $500 is made annually to an outstanding student entering year four of the Engineering program who graduated from a secondary school in School District 61, 62, 63 or 64. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Faculty of Engineering.

* THE BAYNES AWARD IN ENGINEERING — An award of $1000 has been made available by G.E. Baynes, Consulting Engineer. The award will be made to an outstanding undergraduate student in Engineering (who is a Canadian citizen and) who has demonstrated strong qualities of leadership combined with active participation in sports. As part of the selection process the Faculty will consult with the Engineering Student's Association. The selection will be made by the Senate Committee on Awards upon the recommendation of the Faculty of Engineering.

* THE JAMES R. BULLICK MEMORIAL SCHOLARSHIPS — Two scholarships of $1750 each are awarded annually to outstanding students entering one of the final two years of undergraduate studies. One scholarship will be awarded in the Faculty Engineering and one in the Faculty of Arts & Science.

* THE CUNLIFFE ENGINEERING SCHOLARSHIP — An award of $1700 is made annually to an outstanding student entering year 4 of the Engineering program. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Faculty of Engineering.

FACULTY OF ENGINEERING: DEAN'S ENTRANCE SCHOLARSHIPS — A number of scholarships of $2000 each plus tuition and fees will be awarded annually to students with high academic standing who are entering the Faculty of Engineering at the University of Victoria directly from British Columbia secondary schools or regional colleges. The assessment of academic standing of the secondary school students will be based on secondary school course results while assessment of regional college students will be based on college course results. Recipients will be selected by the Senate Committee on Awards upon the recommendation of the Faculty of Engineering. Normally the names of award winners will be announced by May 31.

* THE CHARLES HUMPHREY MEMORIAL SCHOLARSHIP IN ENGINEERING — Awards of $2500 are made annually to two outstanding students proceeding to year 3 or 4 of the Engineering program. Selection of the recipients will be made by the Senate Committee on Awards upon the recommendtion of the Faculty of Engineering.

* THE BETTY AND GILBERT KENNEDY ENTRANCE SCHOLARSHIP IN ENGINEERING — A scholarship of approximately $1000 will be awarded annually to an outstanding student entering the Faculty of Engineering from British Columbia secondary schools or regional colleges. The assessment of academic achievement of secondary school students will be based on secondary school grades while assessment of

*Administered by the University of Victoria Foundation.

college students will be based on college grades. Recipients will be selected by the Senate Committee on Awards upon the recommendation of the Faculty of Engineering.

THE MPR TELTECH LTD. SCHOLARSHIP — An award of $1000 is made annually to an outstanding student proceeding to year 3 or 4 of the Electrical Engineering program. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Faculty of Engineering.

THE JOHANNES G. NORDAL SCHOLARSHIP IN ENGINEERING — An award of $2750 will be made annually to an outstanding undergraduate student in the third or fourth year of the program. The selection will be made by the Senate Committee on Awards upon the recommendation of the Faculty of Engineering.

English

* THE RALPH BARBOUR BURRY MEMORIAL SCHOLARSHIPS — Two scholarships of $1300 each are awarded annually for excellence in English studies to students entering the third or fourth year in an English Major or Honours program. In cases of comparable academic merit, contributions to university and/or community activities and financial need will be considered. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Department of English.

* THE EDGAR FERRAR CORBET SCHOLARSHIP — Three awards of two hundred and fifty dollars ($250) to be awarded annually for proficiency in English to a second year student who is a graduate of a British Columbia high school and who will be majoring or honouring in English in the third year.

* THE IRENE LEE SCHOLARSHIP IN ENGLISH — An award of $425 is made annually to an outstanding student proceeding to year 3 or 4 of a Major or Honours program in the Department of English. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Department of English.

* MARTLET CHAPTER IODE CUTHBERT HOLMES ENGLISH HONOURS ESSAY SCHOLARSHIP — A scholarship to the value of four hundred dollars ($400) will be awarded annually to the student who has written the best English Honours Graduating Essay. The winner will be selected by the Senate Committee on Awards upon the recommendation of the Department of English.

* CHAPTER N, P.E.O. MEMORIAL PRIZE — Two hundred and twenty-five dollars ($225) awarded annually by Chapter N, P.E.O. Sisterhood, to a woman student in first year for excellence in English.

* THE JOHN PETER MEMORIAL SCHOLARSHIP — A scholarship of $600 is awarded annually for excellence in English studies to a student in English 310 who is entering the third year of a Major or Honours program in English. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendtion of the Department of English.

* THE PURVES-CORDONIER PRIZE — An annual prize to be awarded to an undergraduate student demonstrating high academic achievement in the field of 17th and 18th Century English Literature. Selection will be made by the Senate Committee on Awards on the recommendation of the Department of English.

* ROYAL INSTITUTION AND FRANK EATON MEMORIAL SCHOLARSHIP — Two hundred and twenty-five dollars ($225) awarded to the student taking the highest standing in English of the second year.

THE MADAME SANDERSON MEMORIAL SCHOLARSHIP — Three hundred and fifty dollars ($350) offered annually to a promising student for excellence in English and French of the second year.

* THE KATE POTTINGER THOMPSON MEMORIAL SCHOLARSHIP — An award of two hundred and twenty-five dollars ($225) is given annually to the Major or Honours student in English with the best overall performance in the third year. Selection will be made by the Senate Committee on Awards upon the recommendation of the Department of English.

Environmental Studies

B.C. HYDRO SCHOLARSHIPS — B.C. Hydro is establishing five scholarships of $500 each to encourage the development of knowledge and expertise in subjects related to environmental impact assessment work within the context of the British Columbia environment. The scholarships are awarded annually to outstanding students entering year 3 or 4 of the following programs: Biology (1 award), Geography (1 award) and Environmental Studies (3 awards). The Geography recipient must be specializing in Techniques and Methods and/or Resources and Physical courses; the Environmental Studies recipients must be registered in the Major Program with an emphasis on natural resource management or science areas. Selection of the recipients will be made by the Senate Committee on Awards upon the recommendation of the Departments and Program involved.

French

ALLIANCE FRANCAISE SCHOLARSHIPS — Two scholarships of one hundred dollars ($100) each awarded: (1) to the student in the second year who has made the most progress in French and who intends to continue university work in this subject; (2) to the best student entering the fourth year of a Major program in French.

* L'ALLIANCE FRANCAISE DE VICTORIA BOOK PRIZE IN MEMORY OF DR. W.D. WITHERSPOON — An annual book prize will be given to a student graduating with a Major in French. The award is made possible through donations from members of the Alliance Francaise de Victoria. Selection will be made by the Senate Committee on Awards upon the recommendation of the Department of French Language and Literature.

* THE ADELINE JULIENNE DELOUME MEMORIAL SCHOLARSHIPS — Three hundred dollars ($300) each to be awarded to the first year female student and the first year male student attaining the highest grades in French in first year university and intending to continue studies in French at the University of Victoria. Additional awards will be presented to students in the Honours and Major Programs, up to a total of $4,000.

THE FRENCH GOVERNMENT BOOK PRIZES — These prizes, the gift of the French government through the consulate in Vancouver, are awarded annually for excellence in French. Selection to be made by the French Department.

THE MADAME SANDERSON MEMORIAL SCHOLARSHIP — Three hundred and fifty dollars ($350) offered annually to a promising student for excellence in English and French of the second year.

THE PRIZES OF THE AMBASSADOR OF SWITZERLAND TO CANADA — These book prizes will be awarded to an outstanding student of French language and literature, to a student with high standing in German, and to an outstanding student in Italian.

THE KATHARINE YOUDALL MEMORIAL SCHOLARSHIP — A scholarship of $750 will be awarded annually to a female student of high academic standing in the third or fourth year of a Major or Honours program in French. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Department of French Language and Literature.

Geography

B.C. HYDRO SCHOLARSHIPS — B.C. Hydro is establishing five scholarships of $500 each to encourage the development of knowledge and expertise in subjects related to environmental impact assessment work within the context of the British Columbia environment. The scholarships are awarded annually to outstanding students entering year 3 or 4 of the following programs: Biology (1 award), Geography (1 award) and Environmental Studies (3 awards). The Geography recipient must be specializing in Techniques and Methods and/or Resources and Physical courses; the Environmental Studies recipients must be registered in the Major program with an emphasis on natural resource management or science areas. Selection of the recipients will be made by the Senate Committee on Awards upon the recommendations of the Departments and Program involved.

* THE DR. NORMAN BETHUNE MEMORIAL AWARD — An annual award of one hundred and twenty-five dollars ($125) will be made available in memory of Dr. Norman Bethune for the purpose of promoting the study of Traditional China. The award is to be made to a third or fourth year student in the Department of Geography on the basis of high standing in Geography 464A. Selection will be made by the Senate Committee on Awards on the recommendation of the Department of Geography.

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* THE CHAPMAN MEMORIAL SCHOLARSHIP — Two scholarships of $750 each will be awarded annually, one to a student who has completed third year Biology, on the Ecology Program, and one to a student who has completed third year Geography, on the Resources and Physical Program. A book on ecology and conservation, selected by the appropriate department, will be part of the award. These scholarships are given in memory of John Chapman and his daughter Barbara who were well known conservationists. Selection will be made by the Senate Committee on Awards upon the recommendations of the appropriate departments.

* THE CHINESE CONSOLIDATED BENEVOLENT ASSOCIATION OF VICTORIA AWARDS — These awards are granted for the purpose of stimulating the study of the Geography of Chinatowns.

a) Course Award — An annual award of one hundred dollars ($100) will be made to a third or fourth year student in the Department of Geography on the basis of high standing in Geography 442 (Geography of Chinatowns and Chinese Migration). Selection will be made by the Senate Committee on Awards upon the recommendation of the Department of Geography.

b) Travel Award — This award will provide funds to assist Geography students, who are or have been enrolled in Geography 442, to undertake a field study of Chinatowns outside the City of Victoria. The selection of students will be made by the Senate Committee on Awards upon the recommendation of the Department of Geography. The general University requirement that award recipients must return to the University of Victoria in the next regular session and enroll in a full program does not apply to this travel award.

* THE CHINESE FREEMASONS OF VICTORIA AWARD — An annual award of one hundred and twenty-five dollars ($125) is granted for the purpose of stimulating the study of Political Geography, one of the themes in the study of cultural geography. The award is to be made to an undergraduate student in the Department of Geography on the basis of high standing in Geography 205B. Selection will be made by the Senate Committee on Awards on the recommendation of the Department of Geography.

* THE DART COON CLUB AND CHINESE FREEMASONS OF VICTORIA CHINA STUDIES TRAVEL AWARD — This award is funded by the Dart Coon Club of Victoria and the Chinese Freemasons of Victoria for the purpose of stimulating the study of geography of China. This award will provide funds for the organization of a study tour of China and to assist Geography students who are or have been enrolled in Geography 464A and 464B to undertake this tour. The frequency of the study tour will be determined by the Department of Geography. The selection of students will be made by the Senate Committee on Awards on the recommendation of the Department of Geography. The general university requirement that award recipients must return to the University of Victoria in the next regular session and enroll in a full program, does not apply to this travel award.

* THE DART COON CLUB OF VICTORIA AWARD — An annual award of one hundred and twenty five dollars ($125) is granted for the purpose of stimulating the study of Cultural Geography and Multiculturalism in Canada. The award is to be made to an undergraduate student in the Department of Geography on the basis of high standing in Geography 205A. Selection will be made by the Senate Committee on Awards on the recommendation of the Department of Geography.

* THE GEOLOGICAL ASSOCIATION OF CANADA SCHOLARSHIP — An award of $500 is made annually to an outstanding student who is pursuing a full time course of study at any Canadian university directed towards a career in solid earth science. Selection of the recipient will be made by the Senate Committee on Awards upon a joint recommendation from the Departments of Geography and Physics.

* THE CHARLES HOWATSON SCHOLARSHIP — An award of $800 is made annually to an outstanding third year student enrolled in a Geography Major or Honours program. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Department of Geography.

* THE MAO TSE-TUNG MEMORIAL AWARDS — These awards are funded by a bequest from the estate of Mr. Bill Scott.

a) Course Award — An annual award of one hundred and twenty-five dollars ($125) will be made available in memory of Mao Tse-Tung for the purpose of promoting the study of Modern China. The award is to be made to a third or fourth year student in the Department of Geography on the basis of high standing in Geography 464B. Selection will be made by the Senate Committee on Awards on the recommendation of the Department of Geography.

b) Travel Award — This award will provide funds to assist Geography students, who are or have been enrolled in Geography 464A and 464B to undertake a study tour of China. The frequency of the study tour will be determined by the Department of Geography. The selection of students will be made by the Senate Committee on Awards on the recommendation of the Department of Geography. The general University requirement that award recipients must return to the University of Victoria in the next regular session and enroll in a full program does not apply to this travel award.

* ROSS GEOGRAPHY SCHOLARSHIP FUND — A number of scholarships are awarded annually to students in the Major or Honours program in Geography. The scholarships are equal to the full tuition fees for the recipients. Selection will be made by the Senate Committee on Awards on the recommendation of the Department of Geography.

SEASPAN INTERNATIONAL LTD. SCHOLARSHIP — One hundred and fifty dollars ($150) awarded annually to the student leading courses numbered 200 in any two of the following departments: Biology, Chemistry, Geography, Mathematics, Physics. The winner must continue his academic work at an approved university.

* THE AJAIB SINGH SANGHA MEMORIAL SCHOLARSHIP — An annual scholarship of $600 will be awarded to an outstanding student in Geography who has shown special proficiency in the course, The Geography of Southeast Asia. The recipient will be selected by the Senate Committee on Awards upon the recommendation of the Department of Geography. The requirement that the award winner must return to the University of Victoria in the next regular session and must enroll in a full program does not apply to this award.

* WONG FAT-NAN MEMORIAL AWARD — An award of $125 is granted for the purpose of stimulating the study of Overseas Chinese. The award is to be made to an undergraduate student in the Department of Geography on the basis of high standing in Geography 442. The award has been established by Mr. Wong in memory of his father who was a dedicated teacher at the Chinese Public School in Victoria and later a philanthropic entrepreneur in Hong Kong. Selection will be made by the Senate Committee on Awards on the recommendation of the Department of Geography.

* THE PHILIP K.H. WONG SCHOLARSHIP AND AWARD — A scholarship of $500 or more may be awarded to a full time graduate student who is in a Master's program or a Ph.D. program in the Department of Geography and whose research work is related to China or Overseas Chinese. The amount of the scholarship is to be determined by the Department of Geography in consultation with the student's supervisor and will be based on the student's academic standing. Selection will be made by the Faculty of Graduate Studies Awards Committee on the recommendation of the Department of Geography. If no graduate students are eligible for the scholarship, an award of $100 may be made to an undergraduate student in the Department of Geography on the basis of high standing in Geography 464B. Selection will be made by the Senate Committee on Awards on the recommendation of the Department of Geography.

* THE MAY YUEN MEMORIAL SCHOLARSHIP — A scholarship of $300 or more may be awarded to a full time graduate student who is in a Master's program or a Ph.D. degree program in the Department of Geography and whose research work is related to China or Overseas Chinese. The amount of the scholarship is to be determined by the Department of Geography in consultation with the student's supervisor and will be based on the student's academic standing. Selection will be made by the Faculty of Graduate Studies Awards Committee on the recommendation of the Department of Geography. If no graduate students are eligible for the scholarship, an award of $100 may be made to an undergraduate student in the Department of Geography on the basis of high standing in Geography 464A. Selection will be made by the Senate Committee on Awards on the recommendation of the Department of Geography.

German

AUSTRIAN GOVERNMENT BOOK PRIZES — The Austrian Consulate awards book prizes to students in each undergraduate year

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showing proficiency in German studies.

*THE GERMAN CLUB SCHOLASTIC AWARD — An award of $50, established by the University of Victoria German Club (1985-86), is made annually to a promising first, second or third year student intending to continue German studies at the University of Victoria. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Department of Germanic Studies.

GOVERNMENT OF THE FEDERAL REPUBLIC OF GERMANY BOOK PRIZES — These book prizes, the gift of the Federal Republic of Germany through the Consulate General in Vancouver, are available for students in each undergraduate year showing proficiency in German Studies.

* THE DR. NORA HAIMBERGER SCHOLARSHIPS — Two scholarships are awarded annually. One $500 scholarship is given to an outstanding student entering the fourth year of a Major or Honours program in Germanic Studies. The other ($300) is given to a promising student enrolled in Germanic Studies 100 or 149. Selection of the recipients will be made by the Senate Committee on Awards upon the recommendation of the Department of Germanic Studies.

* THE J. BEATTIE MacLEAN SCHOLARSHIP — Four hundred and seventy-five dollars ($475) awarded annually to a student of outstanding merit and promise in second or third year who intends to continue studies in German at the University of Victoria. Selection will be made by the Senate Committee on Awards upon the recommendation of the Department of Germanic Studies.

THE PRIZES OF THE AMBASSADOR OF SWITZERLAND TO CANADA — These book prizes will be awarded to an outstanding student of French language and literature, to a student with high standing in German, and to an outstanding student in Italian.

* THE CARL WEISELBERGER MEMORIAL PRIZE IN GERMAN — To be awarded to a promising senior student in German on the recommendation of the Department of Germanic Studies.

* THE UNIVERSITY OF VICTORIA GERMAN CLUB JUBILEE AWARD — Two awards consisting of a German/English Dictionary will be awarded annually to promising first or second year students intending to continue German studies at the University of Victoria. The award was established by the University of Victoria German Club (1977-78), and is awarded by the Senate Committee on Awards after consultation with the Department of Germanic Studies.

Health Information Science

THE DATA GENERAL (CANADA) INC. SCHOLARSHIP IN HEALTH INFORMATION SCIENCE — A scholarship of $1,000 will be awarded annually to a student in the Health Information Science program, who has obtained a high academic standing in the student's second year and who is continuing in the program. Leading, character and extra curricular activities will also be considered in the selection of the recipient. Selection will be made by the Senate Commitee on Awards upon the recommendation of the School of Health Information Science.

* THE MRS. ANNIE GRESKIW SCHOLARSHIP IN HEALTH INFORMATION SCIENCE — Two awards of $2000 each are made annually to outstanding students proceeding to year 3 or 4 of the Health Information Science Program. Selection of the recipients will be made by the Senate Committee on Awards upon the recommendation of the Director of the School of Health Information Science.

ICBC SCHOLARSHIP IN HEALTH INFORMATION SCIENCE — A scholarship of $2,000 will be awarded annually to a student entering the third or fourth year in the Health Information Science program, who has attained a high academic standing and has been a full-time resident of British Columbia for at least the preceding four years. Selection will be made by the Senate Committee on Awards upon the recommendation of the School of Health Information Science.

Hispanic and Italian Studies

* PABLO CABANAS MEMORIAL SCHOLARSHIP — Scholarships totalling $2000 are awarded annually to outstanding students in second or third year who intend to continue studies in Spanish at the University of Victoria. Selection will be made by the Senate Committee on Awards upon the recommendation of the Department of Hispanic and Italian Studies.

THE GOVERNMENT OF ITALY BOOK PRIZES — These prizes, the gift of the Italian Government through the Consulate in Vancouver, are awarded annually for excellence in Italian. Selection will be made by the Senate Committee on Awards upon the recommendation of the Department of Hispanic and Italian Studies.

THE SPANISH GOVERNMENT BOOK PRIZES — These prizes are to be awarded to the best students in a senior Spanish course. Selection will be made by the Senate Committee on Awards upon the recommendation of the Department of Hispanic and Italian Studies.

THE PRIZES OF THE AMBASSADOR OF SWITZERLAND TO CANADA — These book prizes will be awarded to an outstanding student of French language and literature, to a student with high standing in German, and to an outstanding student in Italian.

*THE GAYLENE DAWN WALKER MEMORIAL SCHOLARSHIP — A scholarship of $200 is awarded annually to an outstanding student proceeding to the third or fourth year of a Major or Honours program in Spanish at the University of Victoria. In awarding the scholarship special consideration will be given to students showing special interest in Spanish art, art history, music or literature. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Department of Hispanic and Italian Studies.

History

* THE PRINCE AND PRINCESS NICHOLAS ABKHAZI BOOK PRIZE IN RUSSIAN HISTORY — A book prize to the value of $200 is awarded annually to the student who writes the best essay dealing with some aspect of Russian History related to the reign of Tsar Alexander II. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Department of History.

* THE KATHLEEN AGNEW MEMORIAL SCHOLARSHIPS — Two awards of three hundred and twenty-five dollars ($325) granted for the purpose of stimulating the study of the History of Canada.

* THE TATTON ANFIELD PRIZE IN AMERICAN HISTORY — An annual book prize is awarded to an outstanding student enrolled in a senior level undergraduate course in either 20th century American history or American diplomatic history. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Department of History.

* THE HANS AND IMOGEN BACH BOOK PRIZE IN MILITARY HISTORY — A prize is presented annually to an undergraduate student pursuing a program in History who achieves the highest grade in a third or fourth year course in Military History or Defence Studies. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Department of History.

* THE ALEXANDER MacLEOD BAIRD MEMORIAL PRIZE IN SCOTTISH HISTORY — A prize of $300 is awarded annually to the student in the Department of History who writes the best essay on a topic in Scottish History. The award has been established by Mrs. A. MacLeod Baird in memory of her husband who was very interested in the role played by the Scots in Canada's history. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Department of History.

CANADIAN INSTITUTE OF INTERNATIONAL AFFAIRS (VICTORIA BRANCH) BOOK PRIZE — An annual prize of one hundred dollars ($100) offered by the Victoria Branch, Canadian Institute of International Affairs in alternate years to: (1) the leading student in the History Department at the University of Victoria in a senior course dealing with Canada's foreign policy; (2) and the leading student in Political Science 240.

* THE LIEUTENANT-GENERAL S.F. CLARK, CBE CD SCHOLARSHIP — An annual scholarship of $100 is awarded to a student of high academic standing in three units of senior undergraduate or graduate course work (or equivalent) dealing with military history or defence studies given in the Department of History or the Department of Political Science. Selection of the winner will be made by the Senate Committee on Awards upon the recommendation of the Department of History or the Department of Political Science.

* THE MAUREEN DOBBIN SCHOLARSHIP — An award of $500 is made annually to the student in a Major or Honours program in History who best combines academic excellence with contributions to

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the University and/or the community. Nomination forms for this scholarship are available from the Department of History and must be submitted by April 15. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Department of History.

* THE CHARLOTTE S.M. GIRARD BOOK PRIZE IN FRENCH HISTORY — A book prize is awarded annually to an outstanding undergraduate student enrolled in a French history course. The prize is given in recognition of Professor Girard's contribution as a former teacher in the Department of History. Selection of the recipient will be made by the Senate Committee on Awards on the recommendation of the Department of History.

* THE WILLARD E. IRELAND SCHOLARSHIP IN HISTORY — A scholarship of approximately $1000 will be awarded annually to an outstanding student who has completed third year and is in a Major or Honours program in History. Preference will be given to a student specializing in Canadian History. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Department of History.

* THE DR. TOBY JACKMAN BOOK PRIZE IN BRITISH HISTORY — An annual book prize is to be awarded to an outstanding undergraduate student enrolled in an advanced course in British History. This prize is established by Dr. Jackman's colleagues on the occasion of his retirement from the University. The recipient will be selected by the Senate Committee on Awards upon the recommendation of the Department of History.

LEON J. LADNER B.C. HISTORY SCHOLARSHIPS — Two scholarships, fifty dollars ($50) to the best undergraduate student studying the History of British Columbia, and one hundred dollars ($100) for the best graduating essay on the History of British Columbia.

* LADNER BOOK PRIZE FOR THE STUDY OF THE HISTORY OF BRITISH COLUMBIA — An annual book prize will be given to an outstanding student of the History of British Columbia. The winner will be selected by the Senate Committee on Awards upon the recommendation of the Department of History.

* THE ALFRED LOFT BOOK PRIZE IN CANADIAN HISTORY — A book prize to be awarded each year to an outstanding student in Canadian History. The prize is given in recognition of Professor Loft's contribution as a former teacher in the Department of History. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Department of History.

* THE ALLAN AND ELIZABETH McKINNON SCHOLARSHIP — An annual scholarship of $1400 will be awarded to a senior student of high academic standing engaged in a Major or Honours program in Canadian history who would find it difficult to resume studies without financial aid. Selection will be made by the Senate Committee on Awards upon the recommendation of the Department of History.

* THE MAJOR-GENERAL G.R. PEARKES, VC, SCHOLARSHIP — An annual scholarship of $250 is awarded to a student in the Department of History with the highest standing in three units of third or fourth year courses dealing with military history or defence studies. Courses eligible for consideration in any year will be identified in the History Department Handbook. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Department of History.

* THE SYDNEY G. PETTIT BOOK PRIZE IN EUROPEAN HISTORY — A book prize to be awarded each year to an outstanding student in European history. The prize is given in recognition of Professor Pettit's teaching and administrative contributions to the Department of History. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Department of History.

* THE R.H. ROY BOOK PRIZE IN MILITARY HISTORY — A book prize is awarded annually to an outstanding undergraduate student enrolled in a military history course. The prize is given in recognition of Professor Roy's contribution as a former teacher in the Department of History. Selection of the recipient will be made by the Senate Committee on Awards on the recommendation of the Department of History.

ROYAL UNITED SERVICES INSTITUTE OF VANCOUVER ISLAND BOOK PRIZES IN MILITARY HISTORY — Book prizes to the total value of $75 will be awarded annually to the two students with the highest academic standing in each of the Canadian and European Military History courses. The two winners and the prizes will be selected by the Senate Committee on Awards upon the recommendation of the Professor teaching the two undergraduate military history courses involved.

* THE NORA LUGRIN SHAW AND WENDELL BURRILL SHAW MEMORIAL SCHOLARSHIP — Three hundred and twenty-five dollars ($325) to be awarded annually to the student of History who writes the best essay dealing with the Magna Carta. The Petition of Rights and The Bill of Rights as the Fountainhead of Constitutional Liberties. The award is to be made by the Senate Committee on Awards upon the recommendation of the Department of History.

UNITED EMPIRE LOYALISTS ASSOCIATION OF CANADA, (VICTORIA BRANCH), BOOK PRIZE IN CANADIAN HISTORY — An annual book prize to be given to an outstanding student of Canadian History in a senior level course. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Department of History.

VICTORIA MUNICIPAL CHAPTER, IODE SCHOLARSHIP — Three hundred and fifty dollars ($350) awarded to an outstanding student in Canadian History in any year.

History in Art

* THE FLORA HAMILTON BURNS SCHOLARSHIP — An annual award of seven hundred and fifty dollars ($750), donated by Flora Hamilton Burns in memory of Emily Carr, is made to an outstanding student entering fourth year of the B.A. Program in History in Art with an announced intention of proceeding to further study in this discipline. Selection will be made by the Senate Committee on Awards upon the recommendation of the Department of History in Art.

* MARTLET CHAPTER, IODE PRIZE FOR SCHOLARSHIP IN HISTORY IN ART — An annual award of four hundred dollars ($400) will be presented for excellence in History in Art. The winner will be selected by the Senate Committee on Awards on the recommendation of the Department of History in Art.

Law

THE ACHESON, SHAW & COMPANY PRIZE IN TORTS — A prize of $400, or such higher value as the donor may determine, will be awarded annually to a student who has demonstrated excellence in the first year Torts course. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Faculty of Law.

THE ADVOCATE'S PRIZE IN LEGAL WRITING — The Advocate, which is the journal of the legal profession in British Columbia, awards an annual prize totalling $1,500 to one or more students in the Faculty of Law who write and submit a paper which, in the opinion of a Committee of the Faculty designated for this purpose, best exemplifies the presentation of a legal subject in a literate and persuasive manner. The selection will be made from among papers submitted in nomination by members of the Faculty or by students themselves.

THE ALEXANDER, HOLBURN, BEAUDIN AND LANG SCHOLARSHIP — A scholarship of $1000 is awarded annually to a student completing the second year of the LL.B. program who has achieved high academic standing and who has demonstrated the qualities required for the practice of law. The recipient will be selected by the Senate Committee on Awards upon the recommendation of the Faculty of Law.

THE BAKER & McKENZIE INTERNATIONAL SUMMER SERVICE SCHOLARSHIP — This scholarship is awarded annually to a student completing the second or third year of the Bachelor of Laws program, who has achieved high academic standing and who has demonstrated an interest in public service and international affairs. Postings may include one or more of the donor's offices, particularly those in Southeast Asia, namely Hong Kong, Singapore, Jakarta and Bangkok. More than one student may be chosen. Apart from a salary for the period of summer employment, the details of any other financial support will be determined in individual cases. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Faculty of Law.

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THE BAKER & McKENZIE PRIZE IN ASIA-PACIFIC COMPARATIVE LAW — This prize of $500, or such higher value as the donor may determine, is made available by the Toronto office of the international law firm of Baker & McKenzie, and is awarded each year to the leading student in the Legal Issues in Southeast Asia Law course, or its successor. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Dean of Law. The purpose of the prize is to recognize academic and scholarly excellence in the recipient's pursuit of legal studies, with particular reference to the Asia-Pacific region.

THE BARRIGAR & OYEN PRIZE IN INTELLECTUAL PROPERTY — A prize of $500, or such higher value as the donor may determine, will be awarded annually to a student who has demonstrated excellence in the Intellectual Property course. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Faculty of Law.

BLAKE, CASSELS AND GRAYDON FIRST YEAR ACHIEVEMENT PRIZE — A prize in the amount of $1000 is awarded to a student who, in the opinion of the Faculty of Law, has shown excellence in first year studies and who has contributed to extracurricular service in the Faculty of Law. Nominations for the service component of the prize will be supplied by the Law Students' Society. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Faculty of Law.

BLAKE, CASSELS AND GRAYDON PRIZE IN COMPETITION LAW — A prize of $500, or such higher value as the donor may determine, will be awarded annually to a student who has demonstrated excellence in the Competition Law course. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Faculty of Law.

THE BRITISH COLUMBIA SUPERIOR COURT JUDGES SCHOLARSHIP — One or two scholarships totalling $1500 are awarded annually on the basis of general academic proficiency to students in the Faculty of Law who have completed the first or second year and are proceeding to the next higher year. This award is established by the members of the Court of Appeal and the Supreme Court of British Columbia. Selection will be made by the Senate Committee on Awards upon the recommendation of the Faculty of Law.

* THE ANNIE CADBY MEMORIAL SCHOLARSHIP — A scholarship, established by Louis F. Lindholm, is awarded annually to the student who attains the highest standing in the introductory course on Constitutional Law offered by the Faculty of Law. The recipient will be selected by the Senate Committee on Awards upon the recommendation of the Faculty of Law. The value of this award will be approximately $400.

THE CAMPNEY, MURPHY PRIZE IN COLLECTIVE AGREEMENTS AND ARBITRATION — A scholarship of $375 is awarded annually to the student who obtains the highest grade in the course on Collective Agreements and Arbitration offered by the Faculty of Law. The recipient will be selected by the Senate Committee on Awards upon the recommendation of the Faculty of Law.

THE CAMPNEY, MURPHY PRIZE IN DEBTOR-CREDITOR RELATIONS — A scholarship of $375 is awarded annually to the student who obtains the highest grade in the course on Debtor-Creditor Relations offered by the Faculty of Law. The recipient will be selected by the Senate Committee on Awards upon recommendation of the Faculty of Law.

CANADA LAW BOOK COMPANY BOOK PRIZES — A book prize of $150 is awarded annually to a student in each year of the LL.B. program for academic excellence in a course designated annually by the Faculty. Normally, the prize will be awarded to a student who achieves the highest grade in a course which does not have a prize associated with the course. The recipients of the prizes will be selected by the Senate Committee on Awards upon the recommendation of the Faculty of Law.

THE CARSWELL COMPANY LIMITED BOOK PRIZES — The Carswell Company Book Prizes are awarded annually to the students with the highest standing in each of the three years of the LL.B. program. The recipients will be nominated by the Faculty of Law to the Senate Committee on Awards.

THE CONSIDINE & COMPANY PRIZE IN EVIDENCE — A prize of $400, or such higher value as the donor may determine, will be awarded annually to a student who has demonstrated excellence in the Evidence Course. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Faculty of Law.

* THE GERALD R.B. COULTAS PRIZE IN ADVOCACY — The Provincial Court Judges' Association of British Columbia has established these Advocacy Prizes to honour the services and leadership of The Honourable Gerald R.B. Coultas who served as Chief Judge of the Provincial Court between 1983-1988 prior to his appointment to the Supreme Court of British Columbia. A prize of $125, or such higher value as the donor may determine, will be awarded annually to a student in each Advocacy section who has demonstrated excellence in the course. The recipients will be selected by the Senate Committee on Awards upon the recommendation of the Faculty of Law.

* CREASE AND COMPANY SCHOLARSHIP IN LAW — A scholarship to the value of full tuition is awarded to the student who stands highest in the second year of the LL.B. Program. The scholarship was established by the Victoria Law Firm of Crease and Company in honour of D.M. Gordon, Q.C.

THE DAVIS & COMPANY PRIZE IN ADMINISTRATIVE LAW — A prize of $500, or such higher value as the donor may determine, will be awarded annually to a student who has demonstrated excellence in the Administrative Law course. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Faculty of Law.

THE DAVIS & COMPANY PRIZE IN ENVIRONMENTAL LAW — A prize of $500, or such higher value as the donor may determine, is awarded annually to a student in the Faculty of Law who has demonstrated excellence in the Environmental Law course. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Faculty of Law.

THE DAVIS & COMPANY PRIZE IN PUBLIC LAW TERM — A prize of $500, or such higher value as the donor may determine, will be awarded annually to a student who has demonstrated excellence in the Public Law Term. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Faculty of Law.

THE DAVIS AND COMPANY SCHOLARSHIP — A scholarship of $1,000 is awarded annually to a student who has completed the first year program in the Faculty of Law with high academic standing. The recipient will be selected by the Senate Committee on Awards upon the recommendation of the Faculty of Law.

* THE RICHARD DEBOO TAXATION PRIZE — A prize of $250 will be awarded annually to the student in third year obtaining the highest standing in Taxation Law (Law 345). Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Faculty of Law.

* THE JIM ELLIS INTERNATIONAL LAW MOOTING AWARD — The award shall be made to the students in the Faculty of Law who have demonstrated excellence in preparing and arguing International Law Moots. The award is made to the students who represent the Faculty of Law in an International Law Moot Court Competition. Funds associated with this award will be used to defray the expenses connected with the competition including expenses incurred by the students attending the competition. The names of the recipients will be engraved on a plaque that will be located in the Begbie Building to commemorate the award. Selection of the recipients of this award will be made by the Faculty of Law.

* THE PROFESSOR JIM ELLIS MEMORIAL PRIZE IN ADVANCED TAXATION — A prize of $300, or such higher value as the donor may determine, will be awarded annually to a student who has demonstrated excellence in the Advanced Taxation course. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Faculty of Law.

* THE PROFESSOR JIM ELLIS MEMORIAL PRIZE IN INTERNATIONAL BUSINESS AND TRADE LAW — A prize of $300, or such higher value as the donor may determine, will be awarded annually to a student who has demonstrated excellence in the International Business and Trade Law course. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Faculty of Law.

*Administered by the University of Victoria Foundation.

* THE PROFESSOR JIM ELLIS MEMORIAL PRIZE IN INTERNATIONAL LAW — A prize of $300, or such higher value as the donor may determine, will be awarded annually to a student achieving the highest standing in the course in International Law. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Faculty of Law.

THE HARPER, GREY, EASTON & COMPANY SCHOLARSHIP — A scholarship of $2000, or such higher value as the donor may determine, will be awarded annually to a student achieving high standing and who is proceeding to the next year of study. The selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Faculty of Law.

* THE HARPER, GREY, EASTON & COMPANY PRIZE IN INSURANCE LAW — A prize of $500, or such higher value as the donor may determine, will be awarded annually to a student who has demonstrated excellence in the Insurance Law course. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Faculty of Law.

* THE ALLAN HIGENBOTTAM PRIZE — The prize is awarded annually to the student in the Faculty of Law who receives the highest standing in the Law, Legislation and Policy course. The endowment for this prize was provided by the Province of British Columbia in memory of the late G. Allan Higenbottam, former Legislative Counsel of British Columbia. The recipient will be selected by the Senate Committee on Awards on the recommendation of the Faculty of Law. The award will have a value of approximately $225.

* THE G. ALLAN HIGENBOTTAM PRIZE IN LEGAL AND LEGISLATIVE DRAFTING — The prize is awarded annually to the student in the Faculty of Law who, in the opinion of the Faculty, has demonstrated excellence in legal and legislative drafting in an upper year course. Selection will be made by the Senate Committee on Awards upon the recommendation of the Faculty of Law. The Prize has been established to commemorate the memory of the late G. Allan Higenbottam, former Legislative Counsel of the Province of British Columbia. The endowment for the Prize has been provided by the family of the late G. Allan Higenbottam.

THE HORNE, COUPAR PRIZE IN FAMILY LAW — A prize of $250, or such higher value as the donor may determine, will be awarded annually to a student who has demonstrated excellence in the Family Law course. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Faculty of Law.

* THE BETTY AND GILBERT KENNEDY SCHOLARSHIP IN LAW — An award of $1500 is made annually to an outstanding student beginning year 2 or 3 of the Law program. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Faculty of Law.

KAMLOOPS BAR ASSOCIATION SCHOLARSHIP — A scholarship in the amount of $750, or such higher value as the donor may determine, is awarded annually to a student in the Faculty of Law who achieves high academic standing in first or second year of the Law program. Preference will be given to qualified students from the area of the Province of British Columbia served by the Kamloops Bar. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Faculty of Law.

THE LADNER DOWNS PRIZE IN APPELLATE ADVOCACY — A prize totalling $600 is awarded annually to students who, in the opinion of the Faculty, have displayed greatest merit as appellate mooters. Normally, the prize is awarded to the team of students selected to represent the Faculty in moot court competition. Selection will be made by the Faculty of Law.

THE LADNER DOWNS PRIZE IN BUSINESS LAW AND PLANNING — A prize of $1,000, or such higher value as the donor may determine, will be awarded annually to a student who has demonstrated excellence in the Solicitors' Practice Term. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Faculty of Law.

THE LADNER DOWNS PRIZE IN CONTRACTS — A prize of $500, or such higher value as the donor may determine, will be awarded annually to a student who has demonstrated excellence in the Contracts course. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Faculty of Law.

THE LADNER DOWNS PRIZE IN REMEDIES — A prize of $500, or such higher value as the donor may determine, will be awarded annually to a student who has demonstrated excellence in the Remedies course. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Faculty of Law.

THE LADNER DOWNS SCHOLARSHIP — A scholarship of $750, or such higher value as the donor may determine, will be awarded annually to a student in the first or second year of the Faculty of Law. The award will be made to a student who, in the opinion of the Faculty, has shown excellence in legal studies. Selection will be made by the Senate Committee on Awards upon the recommendation of the Faculty of Law.

THE LANG, MICHENER, LAWRENCE & SHAW PRIZE IN SECURITIES LAW — A prize of $500, or such higher value as the donor may determine, will be awarded annually to a student who has demonstrated excellence in the Securities Regulations (Law 313) course. The prize will be awarded by the Senate Committee on Awards upon the recommendation of the Faculty of Law.

THE LAW FOUNDATION OF B.C. ENTRANCE SCHOLARSHIPS — The Law Foundation of British Columbia provides funds annually for the establishment of a number of Entrance Scholarships of $5000 to students entering the first year of the Bachelor of Laws program who have outstanding academic records and who have such other qualities, such as service to the community, which indicate they will make significant contributions to the legal profession and the community at large and who are either Canadian citizens or permanent residents of Canada. If the recipient of the Scholarship achieves a high academic standing in the first year law program as determined by the Faculty, the Scholarship will be renewed in a lesser amount but, in any case, not less than $2500 for the second year of LL.B. studies at the University of Victoria and, under the same conditions for the third year LL.B. studies. The Entrance Scholarships are awarded upon the recommendation of a committee consisting of the Dean of Law or his delegate, two members of the Faculty of Law named by the Dean and two representatives of the Law Foundation of British Columbia.

THE LAWSON, LUNDELL, LAWSON & McINTOSH LAW PRIZES IN BUSINESS ASSOCIATIONS — A prize of $300, or such higher value as the donor may determine, will be awarded to a student in each of the two sections of Business Associations, who has demonstrated excellence in the course. In the event that only one section of the course is offered in an academic year, two students in the same section may be selected. If more than two sections are established in any given year, a student in each section, sharing on a pro-rated basis, may be selected. All selections will be made by the Senate Committee on Awards upon the recommendation of the Faculty of Law.

* THE D.J. LAWSON PRIZE IN CORPORATE LAW — The D.J. Lawson Prize in the amount of $200 is awarded annually to the law student who achieves the highest grade in the Corporate Law course. This prize has been established by the partners of Crease and Company to recognize the contributions of D.J. Lawson, Q.C. to the profession and to the practice of corporate law. The recipient will be selected by the Senate Committee on Awards upon the recommendation of the Faculty of Law.

* THE LARS ALFRED LINDHOLM MEMORIAL SCHOLARSHIP — A scholarship, established by Louis F. Lindholm, is awarded annually to the student who attains the highest standing in the Labour Law course offered by the Faculty of Law. The recipient will be selected by the Senate Committee on Awards upon the recommendation of the Faculty of Law. The value of this award will be approximately $400.

THE MACISAAC & COMPANY PRIZE IN COMMUNITY LAW — LEGAL AID CLINIC (LAW 350A) — A prize of $300, or such higher value as the donor may determine, will be awarded annually to a student who has demonstrated excellence in the Community Law Legal Aid Clinic Course conducted at the Law Centre. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Faculty of Law.

* THE HONOURABLE HUGH ALAN MACLEAN MEMORIAL FUND — The Honourable Hugh Alan Maclean Memorial Fund has been established by the Maclean family to recognize the contributions to the development of the law in the province of British Columbia and Canada by the late Hugh Alan Maclean and his father, the late Hugh

*Administered by the University of Victoria Foundation.

Archibald Maclean, K.C. The annual income from the Fund is used to support research into British Columbia legal history, to sponsor an annual lecture series on criminal law and procedure, and to provide up to three scholarships or prizes annually to students in the Faculty of Law who have demonstrated high academic achievement in research and writing on the subjects of legal history or criminal law and procedure.

* THE MACLEAN SCHOLARSHIPS IN LEGAL HISTORY AND CRIMINAL LAW — Up to three scholarships or prizes may be awarded annually to students in the Faculty of Law who have demonstrated high academic achievement in research and writing on the subjects of legal history or criminal law and procedure. The selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Faculty of Law.

* MARTLET CHAPTER IODE SCHOLARSHIP IN LAW — An annual scholarship of four hundred dollars ($400) is awarded to the female student with the highest standing in the second year of the LL.B. Program. The scholarship was established by the Martlet Chapter of the IODE.

THE McCARTHY TETRAULT ESSAY PRIZE IN LEGAL HISTORY — An annual prize of $1,000 will be awarded for an essay on a topic in legal history. The prize will be available to (i) undergraduate or graduate law students and (ii) recent law graduates of the Faculty of Law at either the University of Victoria or the University of British Columbia. Selection of the recipient will be made by a selection committee which reserves the right to withhold the prize if no suitable essay is submitted. The winning essay will be submitted for publication in an appropriate legal journal. Applicants must submit their essays to the Office of the Associate Dean, Faculty of Law, before June 1. The winner, if any, will be selected by July 1.

* THE RONALD S. NAIRNE MEMORIAL AWARD — The Ronald S. Nairne Memorial Award is awarded annually to a student in the Faculty of Law who has attained academic standing in the year and whose contributions to the curriculum or extracurricular activities of the Faculty of Law, which have been based on the student's career experience prior to enrolling in the Faculty, have enhanced the quality of life and the academic experience of both students and Faculty members. The recipient will be selected by the Faculty of Law.

* NATIVE STUDENT SCHOLARSHIP IN LAW — An award of $1600 is made annually to an outstanding native student entering the Faculty of Law at the University of Victoria. Preference will be given to a female student with a demonstrated interest in the area of native women's rights. The recipient will be selected by the Senate Committee on Awards upon the recommendation of the Faculty of Law.

THE NATHAN AND BEL NEMETZ BOOK PRIZE — A prize, with a value of $100, is awarded annually to the student who achieves the highest standing in the third year of the LL.B. program. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Faculty of Law.

THE NORTON, STEWART AND SCARLETT SCHOLARSHIP IN INTERNATIONAL AND COMPARATIVE LAW STUDIES — A scholarship of $500, or such higher value as the donor may determine, will be awarded annually to honour the overall scholastic achievements of a student who has completed two or more courses in the international and comparative law areas of the curriculum. Eligible courses are International Law, International Business and Trade Law, Asia-Pacific Comparative Law, Coastal and Marine Law and such other courses as nominated by the faculty. Selection of the recipient will be made by the Senate Committee on Awards on the recommendation of the Faculty of Law.

THE H.A.D. OLIVER PRIZE IN CRIMINAL LAW — The prize is awarded annually to a member of the graduating class in Law who has demonstrated outstanding academic achievement in the field of Criminal Law. The prize is awarded by the Senate Committee on Awards on the recommendation of the Faculty of Law. The value of this prize will be approximately $200.

THE JOSEPH M. PRODOR PRIZE IN TORTS — A prize of $500 is awarded annually to the student who achieves the highest grade in the law of Torts. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Faculty of Law.

THE ROYAL TRUST PRIZE IN TRUSTS — A prize of $500, or such higher value as the donor may determine, will be awarded annually to a student who has demonstrated excellence in the Trusts course. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Faculty of Law.

THE RUSSELL & DuMOULIN PRIZE IN EMPLOYMENT LAW — A prize of $500, or such higher value as the donor may determine, will be awarded annually to a student who has demonstrated excellence in the Employment Law course. The recipient will be selected by the Senate Committee on Awards on the recommendation of the Faculty of Law.

THE RUSSELL & DuMOULIN PRIZE IN INTELLECTUAL PROPERTY LAW RESEARCH — A prize of $500, or such higher value as the donor may determine, will be awarded annually to a student who has produced an excellent research paper in the area of the Intellectual Property Law, or directly related areas. The paper may be produced within a particular course or by way of a Directed Research (Law 399) paper. The prize will be awarded by the Senate Committee on Awards upon the recommendation of the Faculty of Law.

THE RUSSELL & DuMOULIN PRIZE IN REAL PROPERTY TRANSACTIONS (LAW 317) — The law firm of Russell & DuMoulin of Vancouver has established a Prize in the amount of $500, or such higher value as the donor may determine, to be awarded annually to a student who has demonstrated excellence in the Real Property Transactions course. In the event that the course is taught in two or more sections in a particular year, a Prize of $300, or such higher value as the donor may determine, will be awarded to the student in each section who has demonstrated excellence in the course. The Prize will be awarded by the Senate Committee on Awards upon the recommendation of the Faculty of Law.

THE RUSSELL & DuMOULIN SCHOLARSHIP — A $750 scholarship donated by the Russell & DuMoulin legal firm is offered annually to a student in the Faculty of Law. The award will be made to an outstanding student in first year law. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Faculty of Law.

THE RUSSELL & DuMOULIN PRIZE FOR RESEARCH — A prize of $300, or such higher value as the donor may determine, will be awarded annually to a student who, in the opinion of the faculty, has produced an excellent research paper worthy of wider distribution. The paper may be produced within a particular course or under the rubric of Directed Research (Law 399). Preferred consideration will be given to work in the employment, labour, work place and collective agreement law areas. The recipient will be selected by the Senate Committee on Awards on the recommendation of the Faculty of Law.

* THE J.C. SCOTT-HARSTON PRIZE IN WILLS — The J.C. Scott-Harston Prize in the amount of $200 is awarded annually to the law student who achieves the highest grade in the drafting of wills and who has demonstrated high academic achievement in the course in Wills and Succession. This prize has been established by the partners of Crease and Company to recognize the contributions of J.C. Scott-Harston, Q.C. to the profession and to the development of skills in the drafting of wills. The recipient will be selected by the Senate Committee on Awards upon the recommendation of the Faculty of Law.

SUMMER EMPLOYMENT SCHOLARSHIPS

One or more summer employment scholarships are offered by and under the name of each of the following law firms:

ALEXANDER, HOLBURN, BEAUDIN & LANG
BOUGHTON, PETERSON, YANG & ANDERSON
BRAIDWOOD, MacKENZIE, BREWER & GREYELL
BULL, HOUSSER & TUPPER
CAMPNEY, MURPHY
CONSIDINE & COMPANY
DAVIS & COMPANY
EDWARDS, KENNY & BRAY
FARRIS, VAUGHAN, WILLS & MURPHY
FERGUSON, GIFFORD
FRASER & BEATTY
FREEMAN & COMPANY
GUILD, YULE, LANE, SULLIVAN, MacKENZIE & HOLMES
LADNER DOWNS
LANG, MICHENER, LAWRENCE & SHAW
LAWSON, LUNDELL, LAWSON & McINTOSH

*Administered by the University of Victoria Foundation.

McCARTHY TETRAULT
ROBERTSON, WARD & SUDERMAN
RUSSELL & DuMOULIN
SWINTON & COMPANY
These scholarships are awarded annually to students completing second year law who have achieved academic excellence and have demonstrated the qualities that are required for the practice of law. Interviews by the donor law firm may be part of the selection process. Recipients of these scholarships will be employed by the respective law firms during the summer between the second and third year law. The law firms will pay the students a wage over the summer months and will pay the tuition fees for third year law. In addition, some firms will also provide funds to partially offset the cost of books and materials.

THORSTEINSSONS PRIZE IN TAXATION — A course prize of $350 will be awarded to the student obtaining the highest grade in each teaching section of the basic course in Taxation offered in the Faculty of Law. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Faculty of Law.

UNIVERSITY PUBLISHERS AWARD — University Publishers presents two awards annually of $225 each. One is made to a first year law student about to enter second year studies; a second is made to a second year law student about to enter third year studies. The awards will be based on the students' participation in law student affairs and student government, and upon the joint recommendation of the Law Students' Society and the Dean of the Faculty of Law.

THE BERTHA WILSON SCHOLARSHIP — A scholarship of $750 donated by the University Women's Club of Victoria is awarded annually to the female student with the highest standing in year one of the LL.B. program. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Faculty of Law.

* J. LYLE WILSON BOOK PRIZE IN LAW — An annual award of $75 is awarded to the law student who stands highest in the course in Administrative Law. The award is in honour of J.L. Wilson, formerly Solicitor of the B.C. Hydro and Power Authority on Vancouver Island.

* THE WOOTTON SCHOLARSHIP IN LAW — A scholarship of seven hundred ($700) will be awarded to a student who has completed, with high academic standing, the first or second year program in Law. The recipient shall have demonstrated proficiency in composition and legal research. The scholarship was endowed in 1976 by the Honourable Robert A. Wootton, former Justice of the Supreme Court of British Columbia, to honour members of the legal profession of his own family. The selection will be made by the Senate Committee on Awards upon the recommendation of the Faculty of Law.

Mathematics and Statistics

* STEPHEN A. JENNINGS MEMORIAL SCHOLARSHIP — One or two scholarships totalling two thousand, four hundred dollars ($2400) is awarded annually to an outstanding student entering the third or fourth year of an honours program offered by the Department of Mathematics and Statistics. Preference will be given to a student who has performed well in the W.L. Putnam competition. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Department.

* THE BETTY AND GILBERT KENNEDY SCHOLARSHIP IN MATHEMATICS — An award of $1,500 is made annually to an outstanding student beginning year 3 of an Honours or Major program in Mathematics. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Department of Mathematics and Statistics.

* THE MARK E. MOONEY MEMORIAL SCHOLARSHIP — An award of $250 is made annually to an outstanding third year student in an Applied Mathematics or a Mathematics and Physics Program. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Department of Mathematics and Statistics.

* B.W. PEARSE SCIENCE SCHOLARSHIPS — Four scholarships of four hundred dollars ($400) each will be awarded to the top year student enrolled in an Honours course in Biology, Chemistry, Mathematics, and Physics.

SEASPAN INTERNATIONAL LTD. SCHOLARSHIP — One hundred and fifty dollars ($150) awarded annually to the student leading courses numbered 200 in any two of the following departments: Biology, Chemistry, Geography, Mathematics and Statistics, Physics. The winner must continue his academic work at an approved university.

* THE MARVIN SHINBROT MEMORIAL SCHOLARSHIP — An award of $500 is made annually to an outstanding student beginning the third or fourth year of an Honours program in Mathematics or the Honours Program in Physics and Mathematics. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Department of Mathematics and Statistics.

Music

* THE MURRAY ADASKIN PRIZE IN MUSIC COMPOSITION — An annual award is made to an outstanding student in music composition. The recipient may not receive this award in two successive years. The selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the School of Music.

* THE HARRY AND FRANCES MARR ADASKIN SCHOLARSHIP IN MUSIC HISTORY — An annual award of three hundred dollars ($300) given in honour of these distinguished Canadian musicians by Miss Rivkah Isaacs. The scholarship is awarded to an outstanding music history major entering the final year of undergraduate study and planning to go on to graduate study in musicology. In the case of two equally gifted candidates, need is to be the determining factor. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the faculty members of the School of Music.

* THE MURRAY AND FRANCES JAMES ADASKIN SCHOLARSHIP IN VIOLIN OR VIOLA — An annual award of three hundred dollars ($300) given in honour of these distinguished Canadian musicians by Miss Rivkah Isaacs. The scholarship is awarded to a student violinist or violist entering the third or fourth year of study in the performance program. In the case of two equally gifted candidates, need is to be the determining factor. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the faculty members of the School of Music.

* THE BECKWITH MEMORIAL BOOK PRIZE IN MUSIC — Given in memory of Margaret and Harold Beckwith by the family. Awarded to a graduating Bachelor of Music student for excellence in music. Selection to be made by the Senate Committee on Awards upon the recommendation of the School of Music.

* THE RALPH BARBOUR BURRY MEMORIAL SCHOLARSHIPS IN MUSIC — Three scholarships in varying amounts (minimum award, $800) are awarded annually to Music students. Preference will be given to entering students in any year. The awards will be based on excellence in music. In the case of two equally gifted candidates, need will be the determining factor. Selection will be made by the Senate Committee on Awards upon the recommendation of the School of Music.

THE CJVI MUSIC SCHOLARSHIP — A scholarship of $500 will be awarded annually to a talented student of a brass instrument who has completed at least one year in the Bachelor of Music program. The recipient will be chosen by the Senate Committee on Awards upon the recommendation of the School of Music.

* THE GERTRUDE HUNTLY DURAND MEMORIAL SCHOLARSHIP — A scholarship of $800 will be awarded annually to a piano student, in any year, who has demonstrated potential in areas of accompanying or teaching. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the School of Music.

* THE WALTER J. FLETCHER PIANO SCHOLARSHIP — A scholarship of $550 will be awarded annually to an outstanding student, in any year of the Bachelor of Music program, whose principal instrument is the piano. The selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the School of Music.

* THE IDA HALPERN MUSIC SCHOLARSHIP — An annual award of three hundred and twenty-five dollars ($325) given in honour of Dr. Ida Halpern by Miss Rivkah Isaacs. The scholarship is awarded to an outstanding student entering the third or fourth year of study toward the Bachelor of Music degree and who successfully uses in compositions aspects of the culture of the West Coast Indians. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the School of Music.

*Administered by the University of Victoria Foundation.

THE HARBORD SCHOLARSHIP IN MUSIC — An annual scholarship of five hundred dollars ($500), donated by Mr. and Mrs. Justin V. Harbord, will be available to an outstanding student in the second, third, or fourth year of study for the Bachelor of Music degree. Selection will be made by the Senate Committee on Awards in consultation with the School of Music.

THE JUDITH HARREMAN SCHOLARSHIP IN MUSIC — An award of $750 is made annually to an outstanding female student proceeding to year 3 or 4 in the Music program. Preference will be given to a student specializing in voice or piano. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the School of Music.

* THE DR. AND MRS. W. CLARKE HORNING MEMORIAL PRIZE IN MUSIC

* THE HORNING MEMORIAL SCHOLARSHIPS IN MUSIC

A prize of at least $1100 and three scholarships of $1100 each will be awarded annually to promising composers, performers, teachers and scholars completing their third year of studies in the School of Music. Each of the four sections — Composition, Performance, Music Education and Music History, will nominate their most promising student. Selection of the Prize winner and Scholarship winners will be made by the Senate Committee on Awards on the recommendation of the Scholarship Committee of the School of Music.

J.J. JOHANNESEN SCHOLARSHIP IN MUSIC PERFORMANCE — One or two awards of equal amounts up to a total of $1,500 will be made annually to undergraduate music students from any part of the world demonstrating excellence and/or potential in performance, as soloists in the area of strings, piano and flute. Recipients may be newly admitted or returning students. Selection will be made by the Senate Committee on Awards upon the recommendation of the School of Music.

* THE REBECCA AND ESTHER LAZARUS SCHOLARSHIPS IN MUSIC — Two annual awards each of $275 made available by Miss Rivkah Isaacs for outstanding performers entering the third or fourth year of the University music program. One is to be given to a singer in memory of Rebecca Lazarus Isaacs, and the other is to be given to a pianist in memory of Esther Lazarus Levy. In the case of two equally gifted candidates for either or both of the above, need is to be the determining factor. Selection of the recipients will be made by the Senate Committee on Awards upon the recommendations of the faculty members of the School of Music.

* PERFORMANCE SCHOLARSHIP IN MUSIC — One or more awards are made annually to student(s) for outstanding achievement in performance. The recipients may be newly admitted or returning students. Selection will be made by the Senate Committee on Awards upon the recommendation of the School of Music's Performance faculty.

* THE PAULA RENNING AND ERIC H. RENNING SCHOLARSHIP — A scholarship is to be awarded annually to a student attending the University of Victoria and majoring in Music. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the School of Music.

* THE DOUGLAS ROSS MEMORIAL SCHOLARSHIP — An award of four hundred dollars ($400) is made annually to a student for outstanding achievement in piano performance. The recipient may be a new or a returning student. Selection will be made by the Senate Committee on Awards upon the recommendation of the School of Music.

* SCHOOL OF MUSIC FACULTY STRING AWARDS — Awards made on the recommendation of the School of Music faculty, subject to approval by the Senate Committee on Awards, given annually or as funds permit to outstanding violinists, violists, cellists, or double bassists, in recognition of performance ability. In cases of equal performance skill, need should be the determining factor. The awards are named in recognition of School of Music faculty who made personal contributions to inaugurate this fund, but it is further supplemented through proceeds from scholarship concerts and other sources. The number and size of such awards will be determined annually by the School faculty.

* THE TAYLOR SCHOLARSHIP IN MUSIC — An annual scholarship will be available to an outstanding student in any year of study for the Bachelor of Music degree. Selection will be made by the Senate Committee on Awards on the recommendation of the School of Music. The award is presented in honour of Dr. M.G. Taylor, the first President of the University of Victoria, and Mrs. Taylor, and is administered by the University of Victoria Foundation. If funds permit, additional awards may be made.

THE DAISIE THIRLWALL SCHOLARSHIPS IN VIOLIN — Up to three scholarships in varying amounts are awarded annually to gifted violinists who demonstrate excellence or potential in performance and who are registered in the Bachelor of Music program. Preference will be given to newly admitted students. In the event there are no qualified violinists in any given year, other string instrumentalists will be considered. In the case of equally qualified candidates, need shall be the determining factor. Selection will be made by the Senate Committee on Awards upon the recommendation of the School of Music.

THE VICTORIA COUNCIL, KNIGHTS OF COLUMBUS MUSIC SCHOLARSHIP — An annual scholarship of one hundred dollars ($100) will be awarded to a student demonstrating outstanding achievement in the School of Music. Selection will be made by the Senate Committee on Awards on the recommendation of the School of Music.

* VICTORIA MUSICAL ARTS SOCIETY SCHOLARSHIP — An award of not less than $1000 will be given annually to an outstanding student, entering or continuing in the School of Music and intending to pursue a career in music. The student must have been a resident of the Greater Victoria area for at least two years and not have been a previous recipient of this award. Selection will be made by the Senate Committee on Awards upon the recommendation of the School of Music.

Nursing

* THE MARGARET A. EVANS MEMORIAL SCHOLARSHIP IN NURSING — A scholarship of $1400 will be awarded annually to a student entering the final year of Nursing at the University of Victoria, who has demonstrated both academic achievement and an interest in Gerontological Nursing. Selection of the recipient will be made by the Senate Committee on Awards on the recommendation of the School of Nursing.

* THE ROBERT S. EVANS MEMORIAL SCHOLARSHIPS — Nine scholarships of one thousand dollars ($1000) will be awarded annually to academically outstanding students who intend to continue their studies at the University of Victoria, as follows:

(a) One scholarship to a student in each of the Programs: Child Care, Nursing, and Social Work, on the recommendation of the respective Directors;
(b) One scholarship to a student who has completed Year III in an Astronomy program;
(c) Five scholarships for award within the student body at large.

If no suitable candidates can be found in categories (a) or (b), additional awards can be made in category (c).

THE ESTHER S. GARDOM SCHOLARSHIP — An award of $750 is made annually to an outstanding woman student proceeding to year 4 of the Bachelor of Science in Nursing (B.S.N.) program. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the School of Nursing.

* THE MRS. ANNIE GRESKIW SCHOLARSHIPS IN NURSING — Two awards of $2000 each are made annually to outstanding students proceeding to year 3 or 4 of the Nursing program. Selection of the recipients will be made by the Senate Committee on Awards upon the recommendation of the School of Nursing.

THE RICKER NURSING SCHOLARSHIP — Two hundred dollars ($200) to be awarded annually to a student who has completed the first year of the program with good grades and who has demonstrated potential to provide leadership within a professional role. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the School of Nursing.

Pacific and Asian Studies

THE JAMES BOUTILIER PACIFIC AND ASIAN STUDIES TRAVEL AWARD — An annual travel award to be given to an outstanding student enrolled in a General Program or Major Program in Pacific and Asian Studies or a graduate student (by special arrangement) in the department whose thesis involves doing field work in Oceania. The award will reimburse the student to a maximum of $1,500 for expenses incurred during a study tour of the South Pacific region, to be taken during the Summer Session. Selection of the recipient will be

*Administered by the University of Victoria Foundation.

made by the Senate Committee on Awards upon the recommendation of the Department of Pacific and Asian Studies. The requirement that the award winner must return to the University of Victoria in the next regular session and must enroll in a full program does not apply to this award.

* THE GREGORY HEITZMANN BOOK PRIZE IN JAPANESE STUDIES — A book prize is awarded annually to the student who has achieved the highest standing in Japanese Studies courses each Winter Session. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Department of Pacific and Asian Studies.

VICTORIA CHINATOWN LIONS CLUB SCHOLARSHIP — A scholarship of five hundred dollars ($500) will be awarded annually to one full time student proceeding to year four of the Pacific Studies Major Program with China concentration. The scholarship will be given to the student with the highest overall grade point average for courses on China in the preceding academic year at the University of Victoria. In the case of a tie in academic standing, contribution to the local Chinese community activities and/or financial need will be considered. The recipient must use the award to continue his/her study of China in the Department of Pacific and Asian Studies at the University of Victoria. Selection of the recipient will be made by the Victoria Chinatown Lions Club in May each year upon the recommendation of the Department of Pacific and Asian Studies.

Philosophy

* THE JOHN A. FARVOLDEN BOOK PRIZE IN ETHICS — An annual book prize to be awarded to the student who achieves the highest standing in Philosophy 302: Moral Philosophy.

* THE DAVID KAPLAN BOOK PRIZE IN HONOURS PHILOSOPHY — Offered annually to the student graduating in Honours Philosophy with the highest standing in those philosophy courses required for the Degree.

THE XI NU CHAPTER, BETA SIGMA PHI SORORITY ANNUAL PRIZE — One hundred dollars ($100) to be awarded to a promising and deserving woman student in the third year of a course or courses in Philosophy, Psychology, Sociology, and proceeding to further university work, for books to be chosen in consultation with the winner.

Physics

THE BRITISH COLUMBIA TELEPHONE COMPANY SCHOLARSHIP — Seven hundred & fifty dollars ($750) awarded to a student of first or second year for excellence in Physics. The winner must continue university studies.

* THE JOHN L. CLIMENHAGA SCHOLARSHIP — A scholarship of $1400 is awarded annually to an outstanding student completing second year and entering third year of an Honours or Major program in Physics or Astronomy at the University of Victoria. Selection will be made by the Senate Committee on Awards upon the recommendation of the Physics Department.

* THE CLARENCE C. COOK MEMORIAL SCHOLARSHIP — An award of $350 is made annually to the first year student who achieves the highest standing in 3 units of Physics from Physics 100, 110, 120 or 220 and who plans to take further courses in Physics at the University of Victoria. In the case of a tie, a recommendation will be made in consultation with the instructor(s) involved.

* THE GEOLOGICAL ASSOCIATION OF CANADA SCHOLARSHIP — An award of $450 is made annually to an outstanding student who is pursuing a full time course of study at any Canadian University directed toward a career in solid earth science. Selection of the recipient will be made by the Senate Committee on Awards upon a joint recommendation from the Departments of Geography and Physics.

THE MOLSON COMPANIES SCHOLARSHIPS — A scholarship of five hundred dollars ($500), one in each of the departments of Chemistry, Physics, and Biochemistry/Microbiology, is awarded annually to an outstanding student completing year three in a Major or Honours program. Preference will be given to students who have indicated an interest in the business or scientific aspects of the brewing industry. Selection of each recipient will be made by the Senate Committee on Awards upon the recommendation of the department involved.

* B.W. PEARSE SCIENCE SCHOLARSHIPS — Four scholarships of four hundred dollars ($400) each will be awarded to the top year student enrolled in an honours course in Biology, Chemistry, Mathematics and Physics.

SEASPAN INTERNATIONAL LTD. SCHOLARSHIP — One hundred and fifty dollars ($150) awarded annually to the student leading courses numbered 200 in any two of the following departments: Biology, Chemistry, Geography, Mathematics, Physics. The winner must continue academic work at an approved university.

Political Science

CANADIAN INSTITUTE OF INTERNATIONAL AFFAIRS (VICTORIA BRANCH) BOOK PRIZE — An annual prize of one hundred dollars ($100) offered by the Victoria Branch, Canadian Institute of International Affairs in alternate years to: (1) the leading student in the History Department at the University of Victoria in a senior course dealing with Canada's foreign policy; (2) and the leading student in Political Science 240.

* THE LIEUTENANT-GENERAL S.F. CLARK, CBE CD SCHOLARSHIP — An annual scholarship of $100 is awarded to a student of high academic standing in three units of senior undergraduate or graduate course work (or equivalent) dealing with military history or defence studies given in the Department of History or the Department of Political Science. Selection of the winner will be made by the Senate Committee on Awards upon the recommendation of the Department of History or the Department of Political Science.

THE LADY LAURIER CLUB, ELIZABETH FORBES BOOK AWARD — An award for the purchase of books is made annually to the top female student in the third year of Political Science program. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Department of Political Science.

THE LADY LAURIER IRMA DUNN SCHOLARSHIP — Five hundred dollars ($500) to be awarded annually by the Lady Laurier Club of Oak Bay to a worthy and deserving student entering fourth year at the University and undertaking a course in Political Science.

* THE ROBERT LORNE STANFIELD BOOK PRIZES IN POLITICAL SCIENCE — To be awarded to the top two students in each of Political Science 100 and Political Science 360.

* THE WALTER D. YOUNG BOOK PRIZES — Two prizes of $150 each are awarded annually to the two students registered in first or second year who achieve the highest standing in three units of second year Political Science courses. Selection of the recipients will be made by the Senate Committee on Awards upon the recommendation of the Department of Political Science.

* THE WALTER D. YOUNG PRIZES IN POLITICAL SCIENCE 100 — Annual awards of $150 - $200 to be awarded to the top student in each section of Political Science 100. Selection of the recipients will be made by the Senate Committee on Awards upon the recommendation of the Department of Political Science.

* THE WALTER D. YOUNG SCHOLARSHIP — A scholarship of $2,600 is awarded annually to an outstanding student entering the graduating year of an honours or major program offered by the Department of Political Science at the University of Victoria. The recipient will be selected by a committee after consideration of the following criteria: grades in Canadian studies courses, particularly the grade in an introductory course in Canadian government, political science grades, other postsecondary grades and other activities undertaken at the University and in the wider community. Application forms for this scholarship are available from the Department of Political Science and must be submitted not later than March 15.

Note: The committee may require that candidates for the scholarship submit an essay or term paper done by them for an upper level university course. References may be sought and an interview may be held.

Psychology

* THE W.H. GADDES SCHOLARSHIP — A scholarship of $1700 will be awarded annually to a third or fourth year student in a Major or Honours program in Psychology, which includes at least one course in each of the physiological and the psychological bases of human development. The recipient may continue studies at the University of Victoria

*Administered by the University of Victoria Foundation.

or at some other recognized university. Selection will be made by the Senate Committee on Awards upon the recommendation of the Department of Psychology.

ROTARY CLUB OF SAANICH SCHOLARSHIP — Four hundred dollars ($400) to be awarded annually to the full time third year student who obtains the highest standing in two upper year Psychology courses and is continuing studies at the University of Victoria or at some other recognized university.

THE B.C. PSYCHOLOGICAL ASSOCIATION GOLD MEDAL — Awarded annually to a graduating student in the Honours Psychology program who has demonstrated outstanding achievement in the study of Psychology.

THE XI NU CHAPTER, BETA SIGMA PHI SORORITY ANNUAL PRIZE — One hundred dollars ($100) to be awarded to a promising and deserving woman student in the third year of a course or courses in Philosophy, Psychology, Sociology, and proceeding to further university work, for books to be chosen in consultation with the winner.

Slavonic Studies

* THE MICHAEL DANE MEMORIAL BOOK PRIZE IN RUSSIAN — An annual book prize will be given to the top student in first year Russian who proposes to continue the study of Russian for at least one further year at the University. The winner and the prize will be selected by the Senate Committee on Awards upon the recommendation of the Department of Slavonic Studies.

GOVERNMENT OF THE SOCIALIST REPUBLIC OF YUGOSLAVIA BOOK PRIZE — An annual book prize will be awarded to the best student in Serbo-Croatian. Selection to be made by the Senate Committee on Awards upon the recommendation of the Department of Slavonic Studies.

THE RUSSIAN WORKSHOP IN THE SOVIET UNION TRAVEL AWARD — This award will provide funds to assist Slavonic Studies students, who enroll in Russian 321, to undertake a one-month study in the Soviet Union. The selection of students will be made by the Senate Committee on Awards upon the recommendation of the Department of Slavonic Studies.

* THE J.B. WOOD BOOK PRIZE IN RUSSIAN — An annual book prize will be given to the top student in first year Russian who proposes to continue the study of Russian for at least one further year at the University. The winner and the prize will be selected by the Senate Committee on Awards upon the recommendation of the Department of Slavonic Studies.

Social Work

BRITISH COLUMBIA ASSOCIATION OF SOCIAL WORKERS PRIZE — A prize of two hundred and fifty dollars ($250) is awarded annually to an outstanding student who has completed the first year of the program in the School of Social Work. The selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the School of Social Work.

* THE ROBERT S. EVANS MEMORIAL SCHOLARSHIPS — Nine scholarships of one thousand dollars ($1000) each will be awarded annually to academically outstanding students who intend to continue their studies at the University of Victoria, as follows:

(a) One scholarship to a student in each of the Programs: Child and Youth Care, Nursing, and Social Work, on the recommendation of the respective Directors;
(b) One scholarship to a student who has completed Year III in an Astronomy program;
(c) Five scholarships for award within the student body at large.

If no suitable candidates can be found in categories (a) or (b), additional awards can be made in category (c).

Sociology

* ROY E.L. WATSON SCHOLARSHIP — An annual scholarship will be awarded to an outstanding student entering the third year of the Major or Honours program in Sociology. Selection will be made by the Senate Committee on Awards upon the recommendation of the Department of Sociology.

THE XI NU CHAPTER, BETA SIGMA PHI SORORITY ANNUAL PRIZE — One Hundred dollars ($100) to be awarded to a promising and deserving woman student in the third year of a course or courses in Philosophy, Psychology, Sociology, and proceeding to further university work, for books to be chosen in consultation with the winner.

Theatre

* THE MURIEL CONWAY MEMORIAL SCHOLARSHIP — A scholarship of five hundred dollars $500 is awarded annually to a promising student in Theatre who is continuing at the University of Victoria. This award was established by the family and friends of Muriel Conway to honour her dedication as a patron of theatre, especially the Malvern Festival in England, the Ottawa Little Theatre, and the Victoria Bastion Theatre. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Department of Theatre.

* CRESTVIEW-CHELSEA THEATRE AWARD — An award of three hundred dollars ($300) will be offered at the discretion of the Department of Theatre to a promising and deserving student in Theatre who is continuing at the University of Victoria.

* GWEN DOWNES MEMORIAL BOOK PRIZE — Awarded to the student who gives the best performance in a university play.

* THE TRISH GRAINGE SCHOLARSHIP — One or two scholarships, to a total value of $800, will be awarded annually to promising students who are continuing studies in acting and voice at the University of Victoria or any other public university in British Columbia. The award(s) is presented in honour of Trish Grainge, a reader of audio books for the blind, by Mrs. Ivy B. (Pat) Bevan. Selection of the recipient(s) will be made by the Senate Committee on Awards upon the recommendation of the Department of Theatre.

* THE ELISABETH JACKSON SCHOLARSHIP IN THEATRE — A scholarship of $800 is awarded annually to a third year female student with high academic standing who is continuing in the Theatre program at the University and who, in the opinion of the Department, displays outstanding promise in acting. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Department of Theatre.

* THE BARBARA McINTYRE SCHOLARSHIP IN THEATRE — An annual scholarship of $1300 will be awarded to a third or fourth year student who, in the opinion of the Department of Theatre, displays outstanding ability in the area of theatre in education. If there is no theatre in education candidate, the award may go to a student in any branch of theatre work. A third year student must use the award to complete fourth year studies at the University of Victoria Theatre Department; a fourth year student is allowed the option of furthering studies at a recognized school of theatre or university. Selection will be made by the Senate Committee on Awards upon the recommendation of the Department of Theatre.

* OPENING NIGHT SCHOLARSHIP — A scholarship of $850 is awarded annually to the second year theatre student with the highest academic standing in the first and second year theatre courses who is continuing in the Theatre Program at the University of Victoria. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Department of Theatre.

* THE DOROTHY SOMERSET SCHOLARSHIP IN THEATRE — An annual scholarship of two hundred and seventy-five dollars ($275), made available by Miss Rivkah Isaacs of Victoria, will be awarded to that third or fourth year student who, in the opinion of the Department of Theatre, displays outstanding talent and devotion to any branch of theatre work. A third year student must use the award to complete fourth year studies at the University of Victoria Theatre Department; a fourth year student is allowed the option of furthering studies at a recognized school of theatre, such as the National Theatre School or the Royal Academy of Dramatic Art. Selection will be made by the Senate Committee on Awards upon the recommendation of the Department of Theatre.

THE UNIVERSITY OF VICTORIA REVUE AWARDS — Three awards of one hundred dollars ($100) each are made annually to students who have made outstanding contributions to the performances of large on-campus productions such as those associated with the UVic Revue and the Music Theatre Workshop. Selection of the recipients will be made by the Senate Committee on Awards upon the recommendations of the Department of Theatre and the Department of Art and Music Education.

*Administered by the University of Victoria Foundation.

Visual Arts

THE PAT MARTIN BATES SCHOLARSHIP — An award of $750 is made annually by the University Women's Club of Victoria to the most outstanding woman student completing the third year of a program in Visual Arts. The selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Department of Visual Arts.

* THE HEATHER CRAGG MEMORIAL SCHOLARSHIP — An award of twenty-one hundred dollars ($2100) is made annually to an outstanding student completing year two of a Visual Arts program. The student who receives the award at the end of year two may have the award renewed at the completion of year three of the program. The selection of the recipient and the approval of the renewal will be made by the Senate Committee on Awards upon the recommendation of the Department of Visual Arts.

THE HEINZ JORDAN MEMORIAL SCHOLARSHIP — An award of five hundred dollars ($500) is made annually to an outstanding student completing year two of a Visual Arts program. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Department of Visual Arts.

THE JOHN WYATT PRICE BOOK PRIZE IN PHOTOGRAPHY — A book prize is awarded annually to a student majoring in Visual Arts with an emphasis in photography. Preference will be given to a student who has demonstrated an interest in portraiture. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Department of Visual Arts.

SECTION 4

UNDERGRADUATE AWARDS FOR WHICH APPLICATION MUST BE MADE AT THE UNIVERSITY OF VICTORIA

These awards are open only to students who attend the University of Victoria in the Winter Session specified in this calendar. Application for these awards must be made on forms available in the Office of the Administrative Registrar, unless otherwise indicated, and submitted by the deadline stated in the terms of reference.

THE SARDAR MOHINDER SINGH BEADALL MEMORIAL SCHOLARSHIP — A scholarship of $500 is made annually to an Indo-Canadian student with high academic standing and a record of community or university involvement. The recipient will be chosen by the Senate Committee on Awards. Application forms are available from the Office of the Administrative Registrar and must be returned by April 30.

THE ALAN BOAG SCHOLARSHIP — A scholarship of one thousand dollars ($1,000), the gift of the trustees of a fund established by the late Alan Boag, is available for a student who is taking a major in History, Economics, Law, Political Science, or Sociology. This scholarship, which is open to graduates, or to undergraduates who have completed at least two years at the University, will be awarded for the best essay or report on some aspect of socialism. In making the award special consideration will be given for originality in analysis and treatment. The award will be made on the recommendation of a Selection Committee representing each of the areas of study mentioned above. If no essay reaches a required standard, the award will be withheld. Students intending to compete for this scholarship must obtain the approval of their essay subject from the Department of Political Science. Essays must be submitted not later than April 30.

* THE L. AND G. BUTLER SCHOLARSHIP FOR THE DISABLED — An award of $650 is made annually on the basis of academic performance to a disabled student attending the University of Victoria. The recipient may be a newly admitted or returning student. Students interested in the scholarship should refer to the paragraph on undergraduate scholarship eligibility in the General Regulations (page 291). Application forms may be obtained from the Office of the Administrative Registrar and must be submitted by April 15. Selection of the recipients will be made by the Senate Committee on Awards.

THE CANADIAN UNION OF PUBLIC EMPLOYEES SCHOLARSHIPS — C.U.P.E. will make available the sum of nine hundred dollars ($900) to provide scholarships for three deserving and promising students at the University of Victoria who are continuing their studies here. One award will be given to a student entering year 3; two awards will be given to students entering year 2. The selection will be made on the basis of academic standing. These scholarships are open only to sons and daughters of members of contributing locals of the Canadian Union of Public Employees of the Greater Victoria area. Recipients will be selected by the Committee on Awards in consultation with officials of the C.U.P.E. Scholarship Fund. Applications must be submitted not later than July 31.

* LUCY AND MARGARET CORBET SCHOLARSHIP — Six hundred dollars ($600) awarded annually to a student who has completed pre-medical studies at the University of Victoria and is proceeding to medical school in September. Selection of the winner will be made by the Senate Committee on Awards on the basis of sound academic achievement and demonstrated financial need. Candidates must provide written acceptance of their entry into an approved medical school. Applications must be submitted not later than April 30.

* THE MRS. ANNIE GRESKIW SCHOLARSHIP IN PREMEDICAL STUDIES — Two awards of $2000 each are made annually to outstanding students who are proceeding to premedical studies at the year 3 or 4 level at the University of Victoria. Applicants must provide details of their plans for future medical school attendance on the application form. Application forms are available from, and must be returned to, the Office of the Administrative Registrar by April 30. Selection of the recipients will be made by the Senate Committee on Awards.

* W.H. HICKMAN SCHOLARSHIP — Two scholarships of $750 or, as determined by the Department of French Language & Literature, a single scholarship of $1500 will be awarded to assist students to study French at a francophone university, or at a bilingual university in a francophone environment. Applicants must be registered in a full time program, including at least one course in French, at the University of Victoria, with the intent to study at an appropriate institution for one year and to return to the University of Victoria to complete the program requirements; some preference will be given to first year students.
Eighty percent of the scholarship will be paid upon receipt of documents demonstrating the student's registration at an acceptable institution; the remaining twenty percent will be paid upon the student's completion of registration at the University of Victoria after completion of the program at another institution.
Selection of the recipients will be made by the Senate Committee on Awards on the recommendation of the Department of French Language and Literature. Written applications, including details of the proposed program, are to be submitted to the Department of French Language and Literature by December 15 of the academic year preceding the proposed study at another institution.

* THE ALLARDICE LANCASTER SCHOLARSHIP — A scholarship of $1000 is awarded annually to a student entering the fourth year of an Honours program in the Division of the Humanities, in the Faculty of Arts and Science. Academic standing and participation in university and community activities will be considered. Application forms are available from the Office of the Administrative Registrar and must be returned by April 30. Selection of the recipient will be made by the Senate Committee on Awards.

THE NORMAN LIDSTER AWARD — An award of up to one hundred dollars ($100) will be given annually to a blind student in any year of any faculty for the purchase of special equipment or books. The award is made in memory of Norman Lidster, who authored several books despite being both blind and paraplegic. Selection of the recipient will be made by the Senate Committee on Awards. Applications must be submitted not later than April 30.

* THE OLIVER PRENTICE MEMORIAL — SAANICH ROTARY SCHOLARSHIP — Two hundred and seventy-five dollars ($275) awarded annually to a student of outstanding merit and promise and

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qualities of character indicating worthiness to hold the scholarship, who is planning a business career and is continuing studies at a recognized university or is articled to a chartered accountant, or C.G.A. Selection of the student is to be made by the Committee on Awards of the University of Victoria. Applications must be submitted before April 30.

* THE SENATOR WILLIAM JOHN MACDONALD TRAVELLING SCHOLARSHIP — This award was established by Mrs. T.G. Keir in memory of her grandfather, Senator MacDonald.

The scholarship is awarded every second year, beginning in 1984, to an outstanding student who has received an undergraduate degree from the University of Victoria since the last competition and who is planning to undertake a graduate degree in Arts, Science or Fine Arts at a Scottish university. If there are no suitable candidates wishing to study at a Scottish university then applicants wishing to attend any United Kingdom university will be considered.

The award will have a value of $14,000 and will be payable in two $7,000 installments: one for each of the first two years of the student's graduate program.

Application packages are available from the Secretary of the Senate Committee on Awards, Office of the Administrative Registrar, University Centre. The application package includes three referee forms to be completed by individuals who are familiar with the applicant's work. The application form and the referee forms must all be submitted by November 30.

The selection of the recipient will be made by a Committee, appointed by the President, which is composed of a Dean of one of the Faculties, an individual of professional rank and the Chair of the Senate Committee on Awards. Decisions reached by the Committee are final.

Awards are made after the results of the final examinations for the relevant Winter Session have been determined.

* THE TOM PERRY AWARD FOR SOCIAL RESPONSIBILITY — An award of $TBA is awarded annually to a student who has made an exceptional contribution to environmental or humanitarian causes in association with recognized charitable organizations. Applicants must be enrolled in at least nine units of study at the University of Victoria during the year in which they apply, and must have achieved at least a B+ average in that year. Applicants must also show evidence of financial need. The recipient must register in a post-secondary institution in the following year.

Students should submit a letter of application in which they describe their contributions to such organizations; provide a summary of their anticipated educational and living expenses for the forthcoming academic year; and indicate who will be furnishing letters of recommendation. Letters of recommendation must be submitted by environmental or humanitarian organizations with designated charity status, and provide evidence that the applicant has demonstrated an exceptionally active involvement in the organization. Further details are available at the office of the Administrative Registrar.

Applications and letters of recommendation must be submitted to the Office of the Administrative Registrar by April 30. Selection will be made by a committee composed of a representative of the Environmental Studies Program, a representative from the University Chaplain's Office and a person designated by the Chair of the Senate Committee on Awards in consultation with Ms. Judith White or her estate.

* THE HELEN RODNEY MEMORIAL SCHOLARSHIP — A scholarship of $575 is awarded annually to a student who has graduated from the University of Victoria and who is proceeding to a graduate program in Library Science or a related discipline. This award is tenable at a Canadian university. Selection of the winner will be made by the Senate Committee on Awards in consultation with the University Librarian. Candidates must provide written evidence of their acceptance to an approved program. Applications must be submitted not later than April 30.

* THE ANDREW SOLES MEMORIAL SCHOLARSHIP — A scholarship of $3000 will be awarded annually to an outstanding student, who is registered in a B.A. program at the University of Victoria, and is or was a resident of the Kootenay region of B.C. Application forms are available from the Office of the Administrative Registrar and must be returned by April 30. Selection of the recipient will be made by the Senate Committee on Awards.

* THE UNIVERSITY CHALLENGE SCHOLARSHIPS — One or more scholarships to a total of $675 to be awarded annually from funds won on the CTV Television Program "University Challenge" by Victoria teams. The fund was started in 1971 by a team consisting of Glen Paruk, Robert McDougall, Denis Johnston and Bruce Izard, coached by Professor Alfred Loft. The selection will be made by a joint Student-Faculty Committee under the Senate Committee on Awards on the basis of outstanding service by the candidate to the community and/or the University, coupled with proven high academic ability. Students may apply directly to the Committee or be nominated by a second party but the application must bear the nominee's signature and be accompanied by a letter from the nominator or nominee describing the nomimee's qualifications to hold the scholarship. Applications must be submitted not later than April 30.

THE UNIVERSITY OF VICTORIA ALUMNI UNDERGRADUATE SCHOLARSHIPS — The Alumni Association of the University of Victoria each year offers a number of scholarships in the amount of $1500. The scholarships are made possible through annual fundraising by the Alumni Association. They are open to University of Victoria students entering one of the final two years of undergraduate studies at the University.

The Alumni Association Scholarship Committee applies the following selection criteria for these scholarships:

(a) high scholastic achievement as indicated by the student's previous Winter Session grades;
(b) demonstrated contributions to University and/or other community activities;
(c) satisfaction of the University's General Regulations regarding undergraduate scholarships as outlined in the Calendar.

Nominations must be made by a faculty member and endorsed by the Director of a School or Department Chair. A second reference will be required covering the student's non-academic contribution. All documents must be received in the Alumni Office no later than March 1 of each year. Scholarship recipients eligible for consideration a second time must be renominated. Application forms are avaialble from the Alumni Office.

THE VICTORIA MEDICAL SOCIETY SCHOLARSHIP — One thousand dollars ($1000) is available to a student who wishes to pursue a career in Medicine, has completed at least two years of study at the University of Victoria, and is proceeding to a medical school in Canada next September. Candidates must possess those qualities of character and mind which will lead to success as a medical practitioner, and must have demonstrated sound academic achievement, with at least Second Class standing. Financial need will also be considered. Candidates must provide written acceptance of their entry into an approved medical school. The award will be made by a committee consisting of representatives from the Committee on Awards of the University and the Victoria Medical Society Scholarship Committee, and will be paid through the Bursar of the medical school involved. The successful candidate will be notified in August. The award will be forfeited if the candidate has not entered medical school by January 1992 at the latest. Application forms are available from, and must be returned to, the Office of the Administrative Registrar before April 30.

VICTORIA REAL ESTATE BOARD AWARDS — $1000 awarded annually as a scholarship and $1000 awarded annually as a bursary, to students registered at the University of Victoria who are dependants of members of the Victoria Real Estate Board. Students currently registered at the University of Victoria who find that they must transfer to another university in order to complete their chosen program are eligible to apply for these awards. Selection of the recipients will be made by the Senate Committee on Awards. Applications must be submitted not later than April 30.

* THE WALTER D. YOUNG SCHOLARSHIP — A scholarship of $2,500 is awarded annually to an outstanding student entering the graduating year of a Major or Honours program offered by the Department of Political Science at the University of Victoria. The recipient will be selected by a committee after consideration of the following criteria: grades in Canadian studies courses, particularly the grade in an introductory course in Canadian government, political science grades, other postsecondary grades and other activities undertaken at the University and in the wider community. Application forms for this scholarship are available from the Department of Political Science and must be submitted not later than March 15.

*Administered by the University of Victoria Foundation.

Note: The committee may require that candidates for the scholarship submit an essay or term paper done by them for an upper level university course. References may be sought and an interview may be held.

EDUCATION

Although students may be nominated for awards, in order to ensure that they are considered, students must submit an application for the following scholarships to the Faculty of Education. Application forms which are available at the Faculty office must be submitted by May 31.

* CITY OF GARDENS CHAPTER, SWEET ADELINES INC. SCHOLARSHIP — A scholarship of five hundred dollars $500 is awarded annually to a female student in the Bachelor of Music (Music Education) or the Bachelor of Education (Music Education) degree program, who has demonstrated a talent and achievement in vocal music. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Faculty of Education.

* THE DENTON MEMORIAL BOOK PRIZE — An annual book prize to a student in a professional year (elementary field) who has a first class standing in practice teaching and good general proficiency.

* THE H.O. AND ETTA B. ENGLISH MEMORIAL SCHOLARSHIP — Eight hundred dollars ($800) to be awarded annually for general proficiency and high standing in practice teaching to a student who is returning for further study in the Faculty of Education.

* THE FACULTY OF EDUCATION MEMORIAL SCHOLARSHIP — A scholarship up to the amount of the recipient's tuition fees will be awarded annually to an outstanding student in the Faculty of Education on the basis of previous academic performance and potential as a teacher. In cases where equal scholastic ability has been demonstrated, financial need will be considered. Selection will be made by the Senate Committee on Awards upon the recommendation of the Faculty of Education.

* THE HUGH FARQUHAR MEMORIAL SCHOLARSHIP — An award of $2800 is made annually to a student proceeding to year 2, 3 or 4 in a B.Ed. program. Selection will be based on the following criteria: 1. outstanding academic achievement 2. demonstrated contributions to a range of university and community activities. Final selection will be made by the Senate Committee on Awards, upon recommendation of the Faculty. The selection process at the Faculty level will include an interview of selected candidates.

* THE WILLIAM A. AND FRANCES E. HARPER SCHOLARSHIP — One hundred and seventy-five dollars ($175) to be awarded annually to a deserving and promising student in the Faculty of Education.

* THE A. WILFRID JOHNS MEMORIAL SCHOLARSHIP — Eight hundred and fifty dollars ($850) will be awarded annually to a promising student who has demonstrated the ability to teach Art Education. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Art Education section of the Department of Arts in Education.

* THE M. BEVERLEY VAIO LAW SCHOLARSHIP IN EDUCATION — An award of at least $400 will be presented annually to a student in the Faculty of Education who has excelled in academic and professional courses. The award will normally be made to a student entering fifth year who has a high academic grade point average as well as first class standing in courses involving teaching practica. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Faculty of Education.

* THE GODFREY LAWRENCE STEVENS LEE PHYSICAL EDUCATION SCHOLARSHIP — An award of $425 is made annually to an outstanding School of Physical Education student proceeding to year 2, 3 or 4 of the B.Sc. program with a major in Human Performance. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Faculty of Education.

* THE FRED L. MARTENS SCHOLARSHIP — A scholarship of six hundred dollars ($600) is awarded annually to the School of Physical Education student with the highest grade point average entering year 5 of the B.Ed. degree program. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Faculty of Education.

* ROBERT BURNS McMICKING CHAPTER IODE SCHOLARSHIP — Three hundred dollars ($300) to be presented annually to an upper division student in the area of primary or kindergarten education who has shown promise in practice teaching and has high academic standing. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Faculty of Education.

* THE JOHN AND ALICE McCULLOCH MEMORIAL SCHOLARSHIP — Four hundred dollars ($400) is awarded annually to a student in the Faculty of Education who has completed at least five or six units in Art Education with merit and will be continuing study at the University of Victoria in the Elementary Art Education teaching area. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Art Education section of the Department of Arts in Education.

* THE HOWARD AND LINDA PETCH SCHOLARSHIP — A scholarship of $TBA is awarded annually to a Bachelor of Education student in art, drama or music education entering the professional year who has demonstrated outstanding academic achievement and the potential to become an exemplary teacher in elementary or secondary school. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Faculty of Education.

THE NORA PIGGOTT SCHOLARSHIP — An award of $400 is made annually to an outstanding female student in the Faculty of Education. The award is to be based primarily on an assessment of the student's potential as a teacher as displayed in the practicum. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Faculty of Education.

* THE RUTH ROSE MEMORIAL AWARD — A book prize is awarded annually to 2nd or 3rd year elementary education students with high standing. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Faculty of Education.

* HUGH AND LILIAN SALMOND SCHOLARSHIP — A scholarship of $1000 will be awarded to a student entering the fifth year of a program in intermediate elementary education. The student must have demonstrated excellent teaching performance and the ability to use creative approaches to teaching as determined by a first class standing in student teaching and coursework in the professional year. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Faculty of Education.

* SCHOOL OF PHYSICAL EDUCATION SCHOLARSHIPS — Three scholarships of three hundred and seventy-five dollars ($375) are awarded annually to academically outstanding students who intend to continue their studies in the School of Physical Education at the University of Victoria. The scholarships will be given to the students with the highest grade point average in each of the years 1, 2 and 3. Selection of the recipients will be made by the Senate Committee on Awards upon the recommendations of the Faculty of Education.

THE UNIVERSITY OF VICTORIA REVUE AWARDS — Three awards of one hundred dollars ($100) each are made annually to students who have outstanding contributions to the performances of large on-campus productions such as those associated with the UVic Revue and the Music Theatre Workshop. Selection of the recipients will be made by the Senate Committee on Awards upon the recommendations of the Department of Theatre and the Department of Arts in Education.

* THE LINDA VEY PRIZE — An annual award of $200 is made to the student with the highest achievement in ED-D417. Selection of the recipient will be made by the Senate Committee on Awards on the recommendation of the Department of Psychological Foundations.

* DON WRIGHT SCHOLARSHIP IN MUSIC EDUCATION (INSTRUMENTAL MUSIC) — This scholarship was established by Mr. Don Wright with the aim of strengthening the teaching of instrumental music in the schools. The scholarship of $700 is awarded annually to a full time student in the Bachelor of Music or Bachelor of Education (Music Education) degree program who has demonstrated a talent and achievement in instrumental music and teaching ability at either the elementary or secondary level. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Faculty of Education.

* DON WRIGHT SCHOLARSHIP IN MUSIC EDUCATION (VOCAL AND CHORAL MUSIC) — This scholarship was established by Mr. Don Wright with the aim of strengthening the teaching of vocal and

*Administered by the University of Victoria Foundation.

choral music in the schools. The scholarship of $700 is awarded annually to a full time student in the Bachelor of Music or Bachelor of Education (Music Education) degree program who has demonstrated a special aptitude for vocal and choral music and a teaching ability at either the elementary or secondary level. Selection of the recipient will be made by the Senate Committee on Awards upon the recommendation of the Faculty of Education.

THE ROSALIND W. YOUNG SCHOLARSHIP — Seven hundred and fifty dollars ($750) to be awarded annually by the University Women's Club of Victoria to the woman achieving the highest standing in second year Education who is continuing University studies.

SECTION 5

UNDERGRADUATE AWARDS ADMINISTERED BY THE OFFICE OF AWARDS AND FINANCIAL AID THE UNIVERSITY OF BRITISH COLUMBIA 2075 WESBROOK PLACE, VANCOUVER, B.C. V6T 1W5

Students who submit applications for scholarships to the University of British Columbia and who are competing on the basis of attendance at the University of Victoria, must forward an official transcript of their academic record at the University of Victoria, preferably accompanying the application.

Scholarships which must be applied for on the appropriate form by May 15 unless otherwise stated.

THE EARL KINNEY MEMORIAL SCHOLARSHIP — This scholarship in the amount of $750 has been made available by the Graphic Communications International Union, Local 525, to students entering the second or higher year of a full program of studies at the University of British Columbia, the University of Victoria or Simon Fraser University. To be eligible, an applicant must be a member, or the son, daughter, or legal ward of a member in good standing and must enclose a letter from the Union attesting to their eligibility. The award will normally be made to the applicant with the highest standing as determined by The University of British Columbia.

THE INTERNATIONAL LONGSHOREMEN'S AND WAREHOUSEMEN'S UNION UNDERGRADUATE SCHOLARSHIPS — Three scholarships of $1250 each are offered to members, sons and daughters of members, in good standing, of the International Longshoremen's and Warehousemen's Union. They are open to students in attendance at the University of British Columbia, the University of Victoria, Simon Fraser University, the British Columbia Institute of Technology, or any regional college in British Columbia who will continue in a full program of studies in the next session in an undergraduate faculty. These scholarships will normally be awarded to the candidates with the highest standing as determined by the results of the Final Sessional Examinations conducted in April by the named institutions. The donors reserve the right to withhold awards if the academic standing of candidates is not sufficiently high or to re-award scholarships if winners receive other scholarships of substantial value.

INTERNATIONAL LONGSHOREMEN'S AND WAREHOUSEMEN'S UNION LOCAL 517 GARVIN S.L. "BUD" SMITH SCHOLARSHIP — A $400 scholarship is provided by Local 517 of the I.L.W.U. in memory of its former secretary, "Bud" Smith. The scholarship is open to members in good standing of Local 517, and their sons and daughters. Candidates may attend the University of B.C., the University of Victoria, Simon Fraser University, the B.C. Institute of Technology or any regional college in B.C. and must enrol in a full program of undergraduate studies. The donors reserve the right to re-award the scholarship if the winner receives other scholarships of substantial value.

THE INTERNATIONAL LONGSHOREMAN'S AND WAREHOUSEMAN'S UNION THOMAS P. MAYES SCHOLARSHIP — In memory of Thomas P. Mayes, who until his death in 1968, served as secretary of the Union, the International Longshoremen's and Warehousemen's Union offers an undergraduate scholarship of $1250 to members, and sons and daughters of members, in good standing. The terms and conditions of award are the same as for the three International Longshoremen's and Warehousemen's Union Undergraduate Scholarship, described elsewhere in this section.

THE FACULTY WOMEN'S CLUB ANNE WESBROOK SCHOLARSHIP — This scholarship in the amount of $1000, given by the Faculty Women's Club of the University of B.C., was established in 1919 to honour Anne Wesbrook, wife of the first President of U.B.C., and a founding member and Honorary President of the Club until her death in 1957. It will be awarded to a woman student who has obtained a baccalaureate degree from this university and is continuing her studies at the graduate level or in the Faculties of Medicine, Dentistry or Law at this university or any other approved university; or to a woman who, after 3rd year of university studies, is proceeding directly to a degree in Medicine, Dentistry or Law at this university or any other approved university.

UNDERGRADUATE AWARDS ADMINISTERED BY OTHER INSTITUTIONS

BARBARA E. ADAMS SCHOLARSHIP — This scholarship is offered annually by the Canadian Paraplegic Association, B.C. Division, to assist mobility impaired students to pursue and achieve their career goals. Recipients must be residents of British Columbia, Canadian Citizens or landed immigrants, and are normally expected to attend Canadian educational facilities.

The award is named in honour of Barbara E. Adams, whose life's work has been dedicated to helping the injured and disabled.

Applications and further information are available from the Canadian Paraplegic Association, B.C. Division, 780 S.W. Marine Drive, Vancouver, B.C., V6P 5Y7.

ANDRES WINES LTD. SCHOLARSHIP — A scholarship of five hundred dollars ($500) will be awarded to an undergraduate student at the University of British Columbia, Simon Fraser University, or University of Victoria. This award will be made to a student who is the son or daughter of an employee of Andres Wines or grape grower shipping to Andres Wines. If no one is available in this category it will be awarded to a student who will undertake a project in the field of winemaking either in Microbiology, Engineering, Chemistry, Agriculture or Economics. Application forms are available from Andres Wines (B.C.) Ltd. at 2120 Vintner Street, Port Moody, British Columbia V3H 1W8, and should be submitted no later than August 30. The award will be made by the donor.

THE BAY SERVICE AWARD — A Service Award offered by The Bay (Victoria) is open in competition to students completing Third Year Arts and proceeding to a higher year. Preference will be given to students interested in Department Store careers. To be eligible for this award applicants must qualify in respect to academic standing, ability and personality, and should be considering possible employment with The Bay on graduation. Under terms of the award, employment with The Bay will be guaranteed during the summer vacation preceding the fourth year at the University of Victoria. Subject to satisfactory performance, a winner will, on graduation, be given an opportunity to apply for an executive career with the Company. Interested students should apply to the Personnel Manager, The Bay, not later than March 15. Selection will be made by a representative of The Bay.

ELIZABETH BENTLEY EASTERN STAR SCHOLARSHIPS — The Order of the Eastern Star offers annually a number of scholarships to students who have completed at least two years of University courses. Scholarships are awarded on the basis of need, marks and difficulty of courses. Persons eligible are members, wives, husbands, fathers, mothers, sisters, brothers, sons, daughters, grandchildren or stepchildren of members of the Order of the Eastern Star of B.C. Applications should be sent to: Grand Secretary, Mrs. A. Brooke, 3854 West 38th Avenue, Vancouver, B.C. V6N 2Y4 by July 15.

*Administered by the University of Victoria Foundation.

BRITISH COLUMBIA HISTORICAL FEDERATION SCHOLARSHIP — The British Columbia Historial Federation awards a $600 scholarship to an undergraduate student entering the fourth year of a Major or Honours program in Canadian History with a specialization in the history of British Columbia. Candidates should apply in writing to the selection panel of the Scholarship Committee, outlining their studies to date and indicating their particular areas of interest in British Columbia history. The applicant's letter, plus letters of recommendation from two professors, should be submitted with a recent academic transcript by June 15th to: Scholarship Committee, British Columbia Historical Federation, Box 35326, Station E, Vancouver, B.C. Canada V8R 6S4.

BURNABY HISTORICAL SOCIETY SCHOLARSHIP — The Burnaby Historical Society Scholarship, given by Dr. and Mrs. Blythe Eagles in honour of Evelyn Salisbury, is an annual award of approximately one thousand dollars ($1000) to a fourth year undergraduate student enrolled in a Majors or an Honours program that specializes in the history of British Columbia. Candidates should apply in writing, outlining their studies to date, including a current academic transcript and letters of recommendation from two professors, such application to be submitted by June 15th to: The Burnaby Historical Society Scholarship Committee, c/o The Mayor's Office, 4949 Canada Way, Burnaby, B.C., V5G 1M2.

RAYMOND CREPAULT, Q.C. MEMORIAL SCHOLARSHIP — In memory of Raymond Crepault, Q.C. and to commemorate his accomplishments and his special contribution to the Canadian broadcasting industry, as well as to emphasize his deep commitment, as a French Canadian, to the unity of Canada, the Raymond Crepault estate, Radiomutuel and The Canadian Association of Broadcasters are pleased to announce the creation of a scholarship to be granted to a person wishing to complete his training in journalism or communications with a view to subsequent service in electronic journalism (radio and/or television). This is an annual award of $2,500 which Radiomutuel will present on the occasion of the Annual meeting of the Canadian Association of Broadcasters. It is offered to any French speaking Canadian citizen interested in improving his or her skills in the area of electronic journalism (radio and/or television), through university training or the equivalent thereof, on a full-time basi , in a Canadian institute.

Nominations will be accepted from persons meeting any of the following requirements:

— University graduation in any discipline (first degree).
— University graduation or current studies in communications or journalism (first degree).
— Graduation in broadcasting (radio and TV) technology from a technical institute of recognized standing or the equivalent thereof.
— Current employment in broadcasting but wishing to complete training in this field.

Relevant experience in electronic journalism or any related field could be a major asset.

A selection board of three persons appointed by the Canadian Association of Broadcasters, with the approval of Radiomutuel, will take the following factors into consideration:

1. The candidate's background;
2. The candidate's motivation;
3. Recommendations submitted by the candidate's professor, colleagues or employers, as the case may be;
4. The ability of the candidate to begin, and more particularly, to complete such studies;
5. The candidate's financial need;
6. Whether the candidate is, or not, a Canadian citizen.

The scholarship may be renewed for an additional year, according to the validity of the research project or that of the course content.

All applications must be submitted no later than February 28 of each year (as indicated by the postmark) to the Canadian Association of Broadcasters.

Additional information and application forms may be obtained from Mlle. Danielle Langlais, Canadian Association of Broadcasters, P.O. Box 627, Station "B", Ottawa, Ontario K1P 5S2.

C.W. DEANS MEMORIAL SCHOLARSHIP — A scholarship of $250, established by the Women's Auxiliary to the Canadian Paraplegic Association, B.C. Division, is offered annually to spinal cord injured students. The scholarship will be available to a student beginning or continuing studies in one of the universities in British Columbia. Preference will be given to a student beginning or continuing his/her studies in engineering, but should there be no suitable candidate from that faculty, it will be awarded to a deserving spinal cord injured student in another faculty. The award will be made to a student with a good academic record. First preference will be given to candidates nominated by the B.C. Division of the Canadian Paraplegic Association. Candidates wishing to be considered for these awards should contact the Canadian Paraplegic Association, 780 S.W. Marine Drive, Vancouver, B.C. V6P 5Y7. Applications should be received by the Association by August 15th.

THE ENGINEERING INSTITUTE OF CANADA, VANCOUVER ISLAND BRANCH BURSARY/SCHOLARSHIP — Bursaries or Scholarships are offered annually to students who have graduated from a high school located on Vancouver Island and who have completed the first year of a degree course in Engineering at an institution of higher education. Further information may be obtained from The Engineering Institute of Canada, Vancouver Island Branch Scholarship Society, Box 5343, Station 'B', Victoria, B.C., V8R 6S4. Applications should be obtained from and submitted by July 1 to the above address.

THE ICELANDIC CANADIAN CLUB OF BRITISH COLUMBIA SCHOLARSHIPS — The Icelandic Club of British Columbia provides financial assistance to students of Icelandic origin who are beginning or continuing a program of post-secondary education in B.C. The B.T.H. Marteinsson Memorial Scholarship for a student in a Health related field and the Anne Eyford Memorial Scholarship to be awarded to a student in Fine Arts, will be awarded annually. Selection of recipients will be made on the recommendation of a Scholarship Committee selected by the supporting organization. Each award will be worth a minimum of $200. Additional awards to students beginning or continuing a program of full time post-secondary education may be authorized by the Society from time to time. Students should contact Miss M. Norman, Secretary, Scholarship Committee, The Icelandic Canadian Club of B.C., 903-999 Gilford Street, Vancouver, B.C., V6G 2N8, to request application forms. Completed applications must be returned to the Secretary by September 1.

MUNGO MARTIN MEMORIAL AWARDS — Will be made twice annually from the proceeds of the Mungo Martin Memorial Fund, raised by public subscription under the sponsorship of the B.C. Indian Arts Society of Victoria, B.C., to commemorate Mungo Martin, the late Kwakiutl chief, artist, philosopher and carver, who did so much to revive appreciation of Indian art and traditions of the Northwest Coast, winning renown far beyond its boundaries. The Fund is administered by a Board of Directors. Its members serve without remuneration. The Board of Directors is the sole authority adjudicating awards and its decisions are final. Awards to be made in any amount or amounts in any year within the limitations of available funds at the sole discretion of the trustees. (Awards normally expected to be from $100 to $400). The purpose of the awards is to assist people of Indian racial background to further their education, vocational training, skills and competence in Indian arts and handicrafts. While age and circumstances of qualifying candidates may vary considerably, preference will be given to young people.

Candidates for awards must be of Indian racial background and must be domiciled in the province of British Columbia at the time of application. The recipient of an award may apply for a further award in a subsequent year. It is emphasized that these awards are open not only to those who wish to further their general education or skills, but in particular to those who seek to do creative work to further the artistic heritage of the Indian peoples, in their painting, carving, music, dance, folklore or language. Applications for awards should be made on forms provided by the Society and may be mailed at any time for consideration at periodic meetings of the Board, to the following address: Velva B. Rossiter, 1340 Ryan Street, Victoria, B.C., V8T 5A7.

THE WILLIAM McCALLUM MEMORIAL SCHOLARSHIP — The William McCallum Memorial Scholarship for the study of Law was established in 1977 in recognition of the contributions and many years of service given to Dawson College by the late William McCallum, Chairman of the Board of Governors from 1971 to 1977. This scholarship is awarded annually to a graduate of Dawson College entering, or already studying, Law. The scholarship is renewable in the amount of $400 per year, for a maximum of four years.

The William McCallum Memorial Scholarship will be awarded to students who show high probability of both responsible citizenship and academic and professional success. The basis for selecting winners is

as follows: scholarship, character, leadership and community involvement.

Interested students should submit an application to the William McCallum Scholarship Committee, c/o the Registrar, Dawson College, 485 McGill Street, Montreal H2Y 2H4, before May 1. All official transcripts of credit other than those from Dawson College must be received before an application will be considered. Proof of admission to Law school must be provided by May 30.

THE McCARTHY & McCARTHY ESSAY PRIZE IN LEGAL HISTORY — An annual prize of $1,000 will be awarded for an essay on a topic in legal history. The prize will be available to (i) undergraduate or graduate law students and (ii) recent law graduates of the Faculty of Law at either the University of Victoria or the University of British Columbia. Selection of the recipient will be made by a selection committee which reserves the right to withhold the prize if no suitable essay is submitted. The winning essay will be submitted for publication in an appropriate legal journal. Applicants must submit their essays to the Office of the Associate Dean, Faculty of Law, before June 1. The winner, if any, will be selected by July 1.

RIXON RAFTER SCHOLARSHIP FUND — Following his death in 1963, Mr. Rixon Rafter of Arthur, Ontario, left a portion of his estate to the Ontario School for the Blind to be used to provide scholarships to assist blind persons continuing their education at the postsecondary level. Mr. Rafter was a graduate of the Ontario School for the Blind in Brantford and Queen's University in Kingston and for forty-five years publisher of the Arthur Enterprise News. The Rixon Rafter Scholarship Fund will make available scholarship awards of from $500-$1,000 to legally blind Canadians pursing postsecondary studies with strong career aspirations. Because a limited number of awards are available each year, grants will be made based on the following criteria: financial need, academic achievement, and career goals. Application forms are available from C.N.I.B. Career Counselling Services. These forms must be completed in full and returned to: Chairman, The Rixon Rafter Scholarship Committee, The W. Ross MacDonald School, Brantford, Ontario, N3T 3J9, before July 31. A letter of support from your C.N.I.B. Career Counsellor must accompany your application. The Committee will make a decision on scholarships to be granted before September 1 and awards will be sent out during the month of September. Rixon Rafter expressed a wish that financial assistance be made available to worthy blind Canadians who have the interest, ability and determination to seek higher education. The Rixon Rafter Scholarship Fund seeks to achieve this goal.

THE RHODES SCHOLARSHIP — The Rhodes Trustees offer annually for award in the Province of British Columbia one Rhodes Scholarship. This stipend consists of a direct payment to Oxford University and the Scholar's College of approved fees plus a maintenance allowance paid directly to the Scholar. The sum provided should be sufficient to enable a Scholar to meet necessary expenses for term-time and vacations but those who can afford to supplement it to a modest extent from their own resources are advised to do so.

The Scholarship is tenable ordinarily for two years at Oxford University. A third year (at Oxford or elsewhere abroad) may be authorized in proper cases.

A candidate must be a Canadian citizen or person domiciled in Canada and unmarried. A Rhodes Scholarship is forfeited by marriage after election, or during a scholar's first year of residence. Thereafter a Rhodes Scholar may marry and retain the stipend if the Scholar is able to give appropriate assurance of support and accommodation for the spouse.

A candidate must be at least 19 but under 25 years of age by October 1, 1991.

A candidate may compete in a province in which he is eligible under either (a) or (b) below:

(a) The province of ordinary residence. A candidate who is ordinarily resident in the Northwest Territories may compete in a province if eligible under (b) or, if there is no such province, in Manitoba, Saskatchewan or Alberta.

(b) The province in which university study has taken place, provided, however, a candidate who is ordinarily a resident outside Newfoundland may not compete in Newfoundland.

In that section of the will in which he defined the general type of Scholar he desired, Mr. Rhodes mentioned four groups of qualities, the first two of which he considered most important:

1. Literary and scholastic attainments;
2. Qualities of truth, courage, devotion to duty, sympathy, kindliness, unselfishness, and fellowship;
3. Exhibition of moral force of character and of instincts to lead and to take an interest in his fellows;
4. Physical vigour, as shown by fondness for and success in outdoor sports.

Some definite quality of distinction, whether in intellect or character, or both, is the most important requirement for a Rhodes Scholarship, and it is upon this that Committees will insist. Success in being elected to office in student organizations may or may not be evidence of leadership in the true sense of the word. Mr. Rhodes evidently regarded leadership as consisting of moral courage and an interest in one's fellow men quite as much as in the more aggressive qualities. Physical vigour is an essential qualification for a Rhodes Scholarship, but athletic prowess is of less importance than the moral qualities developed in playing outdoor games. Financial need does not give a special claim to a Scholarship. A candidate for a Scholarship is required to make application by October 25, 1991 and if elected, to go to Oxford in October 1992. Further information concerning the Scholarship and the opportunies for study at Oxford University may be obtained from Shelagh Scarth, 1300-777 Dunsmuir St., Vancouver, B.C., V6C 1M9, (604) 643-7970. UVic applicants must submit application forms to the Administrative Registrar by October 12, 1991.

ROTARY FOUNDATION — The newest educational activity of the Rotary Foundation. Undergraduate Scholarships are awarded to outstanding young men and women for one academic year of undergraduate study abroad.

A candidate for a 1990-91 Scholarship must be: unmarried; between the ages of 18 and 24 inclusive as of July 1, 1990, and have completed two years of undergraduate university level work but not have attained the bachelor's degree or equivalent at the time the Scholarship year is begun. The candidate must be a citizen of the country of permanent residence and in which the sponsoring Rotary club is located.

In this and all other programs of the Rotary Foundation, a Rotarian, a dependent of a Rotarian, a child, a stepchild, grandchild, brother or sister of a Rotarian, or any spouse thereof, is ineligible for an award.

An Undergraduate Scholarship covers the cost of round trip transportation between the Scholar's home and place of study, registration, tuition, laboratory and other school fees, necessary books and educational supplies, meals and lodging, incidental living costs, limited educational travel during the Scholarship year and, in specified instances, intensive language training in the country of study prior to the beginning of the regular academic year.

Awards may be made for study in any field, but not for independent or unsupervised research. Undergraduate Scholarships are awarded for one academic year of study in another country. They are not granted to students to continue studies already begun in a country. It is not expected or intended that an Undergraduate Scholarship will be used as part of a longer period of study abroad. In many cases it is not possible to obtain academic credit for work done during the Scholarship year. Each candidate should ascertain for himself, in advance, whether it will be possible to receive credit for courses taken or work completed during the year abroad.

Applications for an Undergraduate Scholarship must be made through a Rotary club in the district in which the applicant's permanent residence is located or the district in which is located the school at which the candidate is studying at the time of application. The sponsoring Rotary club will provide the necessary application forms and explanatory literature. Rotary clubs may obtain this material from their district governor of the secretariat of Rotary International in December of each year. Application forms must be completed and returned to the Rotary Club by March.

ROYAL CANADIAN LEGION (PACIFIC COMMAND) BURSARY/SCHOLARSHIPS — The Legion (Pacific Command), offers annually a number of awards for students proceeding from high school to university, and some awards to students entering second, third and fourth year. These bursary/scholarships are awarded on the basis of academic standing, financial need, and participation and achievement in student and community affairs. Preference is given to sons and daughters of deceased, disabled, or other veterans, but applications from other worthy students are also considered. Further information may be obtained from Royal Canadian Legion, 3026 Arbutus Street, Vancouver,

B.C. V6J 3Z2. The deadline date for application is May 31.

IRENE SAMUEL SCHOLARSHIP — Scholarships of at least $300 are awarded annually to people who are qualified to enter an accredited University in order to further their education in Teacher Training and/or Judaic Studies. Upon completion of their studies their intent must be to teach Hebrew and/or Judaic Studies in a Jewish School in Canada for a minimum of two years.

Candidates should have a good Jewish and general educational background and broad extracurricular activities and interests. Mature students returning to their studies or those wishing to upgrade their qualifications are also eligible. Financial need as well as academic achievement will be considered.

Further information and applications are available upon request from: NATIONAL COUNCIL OF JEWISH WOMEN OF CANADA, 1111 Finch Avenue West, Suite 401, Downsview, Ontario M3J 2E5.

THE CARDINAL JOSYF SLIPYJ UKRAINIAN STUDIES SCHOLARSHIP SOCIETY — Scholarships up to five hundred dollars ($500) are offered by the Society in memory of Cardinal Josyf Slipyj (1892-1984), professor of faith and spiritual leader of Ukrainian Catholics.

Eligible applicants are those students who are enrolled, or planning to enroll, in one or more accredited courses in a program of Ukrainian Studies, at an undergraduate or graduate level, at any university where such studies are offered.

Selection of successful applicants will be made by the Executive Committee of the Society based upon the applicant's scholastic record and financial need. Priority is given to B.C. residents.

Applications may be obtained by writing to: The President, The Cardinal Josyf Slipyj Ukrainian Studies Scholarship Society, 3277 Douglas Street, Victoria, B.C., V8Z 3K9, and must be returned not later than May 30.

THE SONS OF NORWAY SCHOLARSHIPS — Three Scholarships of $600 each are offered by Sons of Norway Foundations in Canada to students who have shown interest in Norwegian Culture, History or Language. They are open to students who show evidence of sound academic performance and financial need. The awards are tenable, at any recognized Junior College, Vocational Institute, or University in B.C. and can be for any study year. Forward application, not later than July 30, to Sons of Norway Foundation in Canada, No. 905-935 Marine Drive, West Vancouver, B.C. V7T 1A7.

PAUL AND HELEN TRUSSELL SCIENCE AND TECHNOLOGY SCHOLARSHIP — A $20,000 scholarship (paid at $5,000 per year for four years) has been endowed by Dr. and Mrs. Paul C. Trussell and the Government of British Columbia. The scholarship is open to students at any B.C. university or college who have matriculated from a secondary school in the Kootenay-Boundary area (School Districts No. 1-13, inclusive) and will be entering the second-to-last year of undergraduate study in natural or applied sciences (not limited to engineering). Applicants should be planning to enroll in a Masters or Ph.D. degree in natural or applied sciences in pursuit of a career in applied research and development. Selection is based on demonstrated high academic performance and promise of future outstanding achievement, with particular emphasis on creativity, drive and dedication to objectives. Renewals of the scholarship are subject to recipients maintaining a minimum average of 75% or an equivalent GPA in all course work. If an applicant's chosen field of undergraduate study or specialized graduate training is not available at a British Columbia university, the scholarship may be tenable elsewhere at the discretion of the Science Council of British Columbia. Applications and further information are available from the Science Council of British Columbia, Suite 100-3700 Gilmore Way, Burnaby, B.C., V5G 4M1, Telephone: (604) 438-2752. Completed applications and all required documentation must be received by the Council by May 31.

THE ENGINEERING INSTITUTE OF CANADA, VANCOUVER ISLAND BRANCH BURSARY/SCHOLARSHIP — Bursaries or Scholarships are offered annually to students who have graduated from a high school located on Vancouver Island and who have completed the first year of a degree course in Engineering at an institution of higher education. Further information may be obtained from the Engineering Institute of Canada, Vancouver Island Branch Scholarship Society, Box 5343, Station 'B', Victoria B.C., V8R 6S4. Applications should be obtained from and submitted to the above address by July 1st.

THE J.M. WARREN SCHOLARSHIP — The British Columbia Foundation has established a Scholarship to honour Mr. Jack M. Warren in recognition of his many years of distinguished service as Administrator of the British Columbia Cancer Institute and as Comptroller to the British Columbia Cancer Foundation.

The Scholarship of $2,000 will be offered annually to support advanced study or training in cancer treatment and control, including the administration of cancer programs.

Candidates should apply to the Bursary, Scholarship and Awards Committee, British Columbia Cancer Foundation, 2656 Heather Street, Vancouver, B.C. V5J 3J3, prior to December 1, setting out their plan of study and submitting a transcript of their academic record. Candidates must also submit the names, addresses and telephone numbers of two individuals who are familiar with their academic or professional ability, and who have been asked to submit letters of recommendation directly to the Bursary, Scholarship and Awards Committee.

THE ROYAL WESTMINSTER REGIMENT ASSOCIATION SCHOLARSHIP — Two scholarships of $250 each, the gift of the Royal Westminster Regiment Association, will be awarded annually to worthy and deserving students who are continuing their formal education beyond secondary school in recognized institutions of higher learning in any place within Canada or outside Canada. To be eligible, applicants must be direct descendants, male or female, of a member of the Royal Westminster Regiment Association, of a member of the Royal Westminster Regiment CA (M) or one of those battalions which the Royal Westminster Regiment perpetuates, i.e. the 47th, 104th or 131st. The scholarships are also open to applicants who are at the time of application serving members of the Royal Westminster Regiment. The applicants may be in their final year of secondary school or any year of postsecondary study, and may be resident in any place within Canada or outside Canada. The basis of the award will be academic standing in previous studies and need of financial assistance. The Application for Scholarship Form is obtainable from the Scholarship Committee, The Royal Westminster Regiment Association, Box 854, New Westminster, B.C. The cut-off date for application is July 31.

THE WOMAN'S INSTITUTE MEMORIAL SCHOLARSHIP IN HOME ECONOMICS — A scholarship of $250 will be awarded annually by the Woman's Institute of B.C. It is available to the daughter of a member of the Institute. The member must have a good standing for at least three years. Preference is given to a student registering at the University of British Columbia toward a degree in Home Economics. Application by letter from the Institute to the Secretary-Treasurer, Provincial Board, B.C. Woman's Institute, 545 Superior Street, Victoria, B.C., must be received before July 15.

THE WOMAN'S INSTITUTE MEMORIAL SCHOLARSHIP IN AGRICULTURE — A scholarship of $250 will be awarded annually by the Woman's Institute of B.C. It is available to the son or daughter of a member of the Institute. The member must have been in good standing for at least three years. Preference is given to a student registering at the University of British Columbia toward a degree in Agriculture. Application by letter from the Institute to the Secretary-Treasurer, Provincial Board, B.C. Woman's Institute, 545 Superior Street, Victoria, B.C., must be received before July 15.

SECTION 6

AWARDS FOR GRADUATE STUDY

Awards Administered by the Faculty of Graduate Studies

The Faculty of Graduate Studies administers a number of fellowships and awards on behalf of a wide group of departments and granting agencies for students in graduate programs at the University of Victoria. Unless otherwise stated, all awards are made annually by the Graduate Faculty Awards Committee on the basis of recommendations from the appropriate departments.

FELLOWSHIPS

General Regulations: Unless otherwise stated in the terms of a specific graduate fellowship, the following regulations apply:

1. No duties are attached to these Fellowships.
2. All Fellowship holders must be registered as full-time students during the tenure of their award (as defined by Faculty of Graduate Studies regulation 2.5).
3. There is a limit on the total length of time a student may hold a Fellowship. It is the policy of the Faculty of Graduate Studies not to continue Fellowship support beyond the second year in a Master's program, or the third year in a Doctoral program, even if the requisite grade point average is maintained. In the case of a student proceeding to a Ph.D. directly from a Bachelor's degree, support may be maintained for four years only.
4. Renewal of Fellowships is not automatic. Consideration for subsequent awards is dependent upon the maintenance of a cumulative grade point average of at least 7.00, and the recommendation of the department/school.
5. Students are not allowed to hold another major award (e.g. SSHRC, NSERC, MRC) in conjunction with a University of Victoria Fellowship. Should a student be offered such an award after acceptance of a Fellowship, the Fellowship must be forfeited. It is the student's responsibility to write to the Dean's office at least one month prior to the start date of this award to resign the Fellowship. If a student fails to do so, and collects monies concurrently from two major awards, the amount paid out by Graduate Studies must be repaid according to a schedule laid down by the Dean. Additional disciplinary action may be taken after consultation with the department/school concerned.
6. Fellowship holders may accept paid employment, but this ***must not exceed 120 hours*** (including contract research or consulting work) in any four-month term, either on or off campus. If a student commences employment above the allowable limit, it is her/his responsibility to advise the Dean's office and resign the Fellowship. If a student fails to follow this regulation, the amount paid to the student must be repaid according to a schedule laid down by the Dean. Additional disciplinary action may be taken after consultation with the department/school.
7. Students must confirm that they intend to accept the Fellowship within the time specified in the offer of award. If this is not done, the award will be forfeited and reassigned.
8. Fellowships are not normally portable. The Dean's permission is required to cover research elsewhere.
9. No student may collect his/her Fellowship award if he/she is in debt to the University.

UNIVERSITY OF VICTORIA FELLOWSHIPS:

University of Victoria Fellowships of $11,000 (Master's) and $12,000 (Ph.D.) may be awarded by the Faculty of Graduate Studies to students of high academic standing registered full time in the Faculty as candidates or provisional candidates for a degree.

Application for the above should be made at the time of application for admission, in the space provided on the Application for Admission (Faculty of Graduate Studies). Applications must be complete by February 15 in order to be considered. All applicants who meet the eligibility criteria are encouraged to apply. New students (or students who have not been previously considered for a Fellowship) will be notified in writing of awards offered by approximately March 31. Students eligible for renewal (see #2, above) must be recommended by their Departments. Departmental Graduate Advisers will be notified of eligible students by the Dean of Graduate Studies Office.

The University of Victoria offers annually to new and continuing students approximately 150 Fellowships of 12 months duration.

CANADIAN PACIFIC FELLOWSHIPS: $25,000 has been provided by Canadian Pacific for outstanding students in Economics. This amount may be distributed as Fellowships if eligible students are available.

* THE KING-PLATT FELLOWSHIP: Two Fellowships of $13,000 may be awarded to graduate students in Biology, with preference given to students whose work bears on the ecology of birds.

* THE AMELIA LEITH MEMORIAL FELLOWSHIP: (Total Award $12,000) — A Fellowship of $12,000 may be awarded to a graduate student in Biology whose studies are in an area of horticultural significance. The Fellowship may be renewed for a second year in the case of a M.Sc. program, and for a third year in the case of a Ph.D. program. An allowance of $1,000 for books, equipment, and travel assistance will be added to the award. If no candidate is eligible for a Fellowship, up to three scholarships of $3,500 each may be offered to graduate students in Biology whose studies are of horticultural significance.

MARITIME AWARDS SOCIETY OF CANADA GRADUATE FELLOWSHIPS — An annual fellowship in the amount of $10,000 will be awarded to a student pursuing graduate studies at the Masters or Ph.D. level in an area pertinent to Canada's maritime interests. Priority will be given to studies in such fields as naval, mercantile and oceanic history, policy studies on such topics, and maritime-related strategic studies. The fellowship is tenable for a maximum of two years, but may not necessarily be offered in any given year.

Applications are to be made to the Faculty of Graduate Studies. Selections will be made by the Graduate Admissions and Awards Committee on the recommendation of the Pacific and Maritime Strategic Studies Group in consultation with the Department of History.

Adjusted Fellowships

Donors have provided a number of additional Awards as supplementary grants to full time students who hold either University of Victoria Fellowships or external Scholarships (e.g. from NSERC, SSHRC).

* THE FLORA HAMILTON BURNS FELLOWSHIP: — An additional grant of approximately $700, donated by Flora Hamilton Burns in memory of Emily Carr, may be awarded to a highly qualified student in History in Art.

* THE LEWIS J. CLARK MEMORIAL FELLOWSHIPS: — Two additional awards of $1,500 may be granted, one to a graduate student in Biology, with preference to a student in Botany, and one to a graduate student in Chemistry. Selection of the recipients will be made on the recommendation of the Departments of Biology and Chemistry respectively. Holders of Natural Sciences and Engineering Research Council Postgraduate Scholarships may also receive this award, in which case $1,500 will be added to the NSERC Scholarship.

* THE W. GORDON FIELDS MEMORIAL FELLOWSHIP: — Awarded in memory of a former Head of the Biology Department. An additional grant of $1,200 may be awarded to a graduate student in Marine Biology who already holds a major fellowship and who has shown an aptitude for teaching. If no candidate is eligible for a Fellowship or NSERC Scholarship, one or more scholarships valued between $500 and $1,000 may be awarded.

THE RAY HADFIELD MEMORIAL FELLOWSHIP: — A fellowship of approximately $2,500 may be awarded to a graduate student of Biochemistry for study in the field of immunology, immunochemistry, and protein chemistry, especially as these bear on human conditions such as rheumatic diseases. Selection of the recipient will be made by the Graduate Faculty Awards Committee on the recommendation of the Ray Hadfield Arthritis Research Fellowship Committee, which will consist of two faculty members of the Department of Biochemistry and Microbiology appointed by the Dean of Graduate Studies and two members appointed by the Arthritis Society, B.C. Division, Victoria Branch. The student must be eligible for a University of Victoria Graduate Fellowship.

* THE CHARLES S. HUMPHREY GRADUATE STUDENT AWARDS: — Additional awards, each of $2,500, may be granted to highly qualified candidates in the Divisions of Science and Engineering.

*THE SAM AND JUNE MACEY GRADUATE STUDENT AWARD: — An additional grant of $1,000 will be awarded annually to the best entering first year Masters student in English or History.

* THE M.C. MELBURN AWARDS: — Two additional grants of $700 may be awarded to graduate students in Biology, with preference to students in Botany. If no candidate is eligible for a Fellowship or NSERC Scholarship, a single scholarship of $1400 may be awarded to a student in Botany.

* THE R.M. PEARCE MEMORIAL FELLOWSHIP: — The R.M. Pearce Memorial Fellowship, valued at approximately $1500, will be awarded annually to a highly qualified full time graduate student who holds a major award such as an NSERC Scholarship or UVic Fellowship and is entering, or is enrolled in, a Master's or Ph.D. degree program in

*Administered by the University of Victoria Foundation.

the Department of Physics and Astronomy at the University of Victoria. Application should be made to the Graduate Committee, Department of Physics and Astronomy, University of Victoria. Selection will be based upon the recommendation of this Committee to the Graduate Faculty Awards Committee.

HOWARD E. PETCH RESEARCH SCHOLARSHIP — Ten scholarships of $5000 each will be available to graduate students receiving either national awards (e.g. NSERC, MRC, SSHRC) or University Fellowships. The Howard E. Petch Scholarships are tenable for one year only for a post-graduate program. Departments will be asked to recommend one eligible student per year for consideration. Selection will be made by the Graduate Admissions and Awards Committee.

* THE R.M. PETRIE MEMORIAL FELLOWSHIP: — The R.M. Petrie Memorial Fellowship is awarded annually to one or more highly qualified students who wish to work toward the M.Sc. or Ph.D. degree in Astronomy at the University of Victoria. The Fellowship may be held concurrently with a University of Victoria Fellowship, in which case its value will be about $2500, or with an NSERC Postgraduate Scholarship, when it will be valued at $1000. If progress is satisfactory, it may be renewed for a second year, and for a third year in the case of a Ph.D. program. Students from outside Victoria may be entitled to travel assistance to take up the R.M. Petrie Fellowship at the University. Selection of the recipients will be made by the Graduate Faculty Awards Committee on the recommendation of the Petrie Memorial Fellowship Committee to the Department of Physics and Astronomy Graduate Committee.

THE MACDONELL GRADUATE AWARD IN PHYSICS: — the MacDonell Graduate Award in Physics, valued at $2,000, is granted annually to a highly qualified student commencing a full time program of graduate study in Physics and is tenable for one year.

SCHOLARSHIPS, AWARDS, BURSARIES AND PRIZES

These are normally awarded annually unless otherwise specified. It is not necessary to hold a major Fellowship or Scholarship in order to qualify for the awards under this heading. Selections are made by the Faculty of Graduate Studies Awards Committee on the recommendation of the relevant department/s.

* THE RANDY BAKER MEMORIAL SCHOLARSHIP — An award of $275 is made to a graduate student with high standing in Biology, with an emphasis in Marine Biology.

DRINA FRASER BAXTER MEMORIAL BURSARY — A bursary of approximately $400 in memory of Drina Baxter may be awarded to a graduate student studying in the area of Special Education. The bursary will be based firstly on the financial circumstances of those eligible and secondly on the their academic standing. Selection will be made by the Graduate Faculty Awards Committee on the recommendation of the Chair, Department of Psychological Foundation in Education.

* THE WILLIAM G. BENDER SCHOLARSHIP — A single Scholarship of $1,100 or two of $550 may be awarded to an outstanding student in the Master of Public Administration program who has achieved high standing in Personnel Management and/or Industrial Relations courses.

* W.A.C. BENNETT SCHOLARSHIP — A scholarship of $1,000 may be awarded to an outstanding student in the Master of Public Administration program completing the first year of the program. Selection will be made by the Graduate Admissions and Awards Committee on the recommendation of the School's Admissions, Programs and Standards Committee.

* THE ARTHUR LESTER BENTON BURSARY — A bursary of $500 may be awarded to a graduate student in Psychology in the field of Neuropsychology.

BRITISH COLUMBIA GOVERNMENT MANAGERS' AWARD — An award to $500 will be given annually to the student who is the most outstanding in the second half of a full-time Master's program in Public Administration. The award will be made by the Faculty of Graduate Studies Awards Committee on the basis of a recommendation by the School of Public Administration.

CANADIAN PACIFIC SCHOLARSHIPS — $25,000 has been provided by Canadian Pacific for outstanding students in Economics (see Fellowships). At the discretion of the Department of Economics, this amount may be awarded as Scholarships of $3,000 - $5,000.

THE MAUREEN DE BURGH MEMORIAL SCHOLARSHIP — An annual award of up to $500 to a graduate student of high academic standing working in the field of marine biology. The award is to be made on the recommendation of the Department of Biology to the Faculty of Graduate Studies Awards Committee.

* THE SINCLAIR FARRIS AWARD — A Scholarship of $400 may be awarded to an undergraduate or graduate student in Biology for interest and achievement of excellence in the field of microtechnique. The award was established to recognize Sinclair Farris who worked with the Canadian Forestry Services (Environment Canada) for 38 years, specializing in microtechnique. In the case of a graduate student, selection will be made by the Graduate Faculty Awards Committee on the recommendation of the Department of Biology.

GOVERNOR GENERAL'S GOLD MEDAL — The Governor General's Gold Medal is awarded annually to a student in a Master's degree program within the Faculty of Graduate Studies on the basis of an outstanding GPA and thesis.

* THE HOY SUN BENEVOLENT ASSOCIATION SCHOLARSHIP — A scholarship of $500 or more may be awarded to a full time graduate student who is enrolled in a Master's or Ph.D. degree program in the Department of Geography, and whose research work is related to China or Overseas Chinese. The amount of the scholarship is to be determined by the Department of Geography in consultation with the student's supervisor and will be based on the student's academic standing.

Selection will be made by the Faculty of Graduate Studies Awards Committee on the recommendation of the Department of Geography. If no graduate students are eligible for the scholarship, an award of $100 may be made to an undergraduate student in the Department of Geography on the basis of high standing in Geography 464B.

THE LEON J. LADNER B.C. HISTORY SCHOLARSHIP — Two scholarships of $500 may be awarded for the best graduate thesis on the History of British Columbia.

* THE KING-PLATT MEMORIAL AWARDS: (See also under Fellowships) — Up to five awards of $3,000 each may be awarded annually to graduate students enrolled in a M.Sc. or Ph.D. program in the Department of Biology whose work is related to the ecology of birds.

* THE MARTLET CHAPTER IODE GRADUATE SCHOLARSHIP FOR WOMEN — A Scholarship to the value of $500 will be awarded to a woman student with high standing who is entering the second year of a Master's program.

* THE M.A. MICKLEWRIGHT AWARD — An annual award of $50 will be granted to the full time graduate student with the highest grade point average at the end of his or her first year of graduate study in the Department of Geography. Selection of the recipient will be made by the Awards Committee of the Faculty of Graduate Studies upon the recommendation of the Department of Geography.

* THE MILLEN GRADUATE AWARD — An award of $3,000 may be made annually to a student enrolling in a M.F.A. or M.A. program in Creative Writing. Selection of the candidate will be based on academic standing acceptable to the Graduate Faculty and an assessment by the Department of Creative Writing of

a. an original lyric poem, beautiful in form and content, or
b. a prose original, fact or fiction, of not more than thirty-five hundred words, which is beautiful in form and content.

Submission of original writings must be made according to the format and entry dates prescribed by the Department of Creative Writing. Students holding this award may apply for a University of Victoria Graduate Fellowship.

* THE G. NEIL PERRY AWARD IN PUBLIC ADMINISTRATION — An award of $125 will be granted to a student whose Administration 598 Report is judged to be the best.

* THE TOM PERRY AWARD FOR SOCIAL RESPONSIBILITY — This award may be awarded annually to a graduate or undergraduate student. Full terms of reference are outlined in the undergraduate awards section (page 341).

If a graduate student is recommended, the award shall be made by the Graduate Admissions and Awards Committee on the advice of a Committee composed of a representative of the Environmental Studies Program, a representative from the University Chaplain's Office, and a

*Administered by the University of Victoria Foundation.

person designated by the Chair of the Senate Committee on Awards in consultation with Ms Judith White or her estate.

THE PHILLIPS, HAGER AND NORTH LTD. GRADUATE BURSARY — A bursary of $1,500, the gift of Phillips, Hager and North Ltd., may be awarded to a graduate student in Economics. The bursary will be based firstly on the financial circumstances of those eligible and secondly on their academic standing. The total amount may be divided into two awards.

* MAIRI RIDDEL MEMORIAL BOOK PRIZE — A book prize of $100 is awarded to a graduate student in the English Department for the best seminar essay.

* THE SCHOOL OF PHYSICAL EDUCATION GRADUATE SCHOLARSHIP — $300 will be awarded to a M.Ed. or M.A. Physical Education student of good academic standing. The award will normally be given to a second year graduate student and will be based on the student's academic performance and active involvement with the School of Physical Education during the preceding year. This Scholarship will not normally be given to students who are currently holding Fellowships or other major awards.

* THE SCHOOL OF PUBLIC ADMINISTRATION SCHOLARSHIPS — An amount of $100 will be awarded annually to highly qualified candidates in the School of Public Administration.

* THE DEREK SEWELL GRADUATE SCHOLARSHIP — Two scholarships of up to $1000 each will be offered to graduate students in the Department of Geography in the fields of natural sciences and/or management of the environment to recognize Dr. Derek Sewell who made outstanding contributions to these fields in Canada and throughout the world. These awards will be made by the Graduate Admissions and Awards Committee on the recommendation of the Department of Geography.

STEVENSON, KELLOGG, ERNST AND WHINNEY AWARD — A prize of $250 (or such higher value as the donor may determine) may be awarded annually to the part time student in the School of Public Administration who achieves the highest standing, and is judged to be making a significant contribution to the School/and or community. Selection will be made by the Graduate Admissions and Awards Committee on the recommendation of the School's Admissions, Programs and Standards Committee.

* DAVID STEWART BOOK PRIZE FOR COUNSELLING — A book prize of $65 is awarded to the most promising graduate student in the Counselling Psychology in Education program, as evidenced by papers published or presented at professional conferences. Selection will be made by the Awards Committee of the Faculty of Graduate Studies on the recommendation of the Graduate Adviser, Department of Psychological Foundations in Education.

THE VICTORIA REGIONAL GROUP OF THE INSTITUTE OF PUBLIC ADMINISTRATION OF CANADA (IPAC) SCHOLARSHIP — A Scholarship of $500 may be awarded to the most outstanding student having completed the first year of full time study towards the M.P.A. degree and continuing in the second year of full time studies in the School of Public Administration.

* VICTORIA CANADA-CHINA FRIENDSHIP ASSOCIATION BURSARIES — A number of awards, which may vary annually, valued at $350 each, are available to students from the People's Republic of China who are either already attending graduate school at the University of Victoria or who have been offered admission. These awards are intended to defray costs of special language courses required by students. They may also be used for other necessary courses or materials recommended for the students' programs by their supervisory committee.

Application should be made in writing to the Dean of Graduate Studies. Selection of recipients will be made by the Graduate Faculty Awards Committee after consultation with a review committee of the Canada-China Friendship Association.

* THE DR. E. AND MRS. M. VON RUDLOFF AWARD — An award of $750 is to be awarded to a continuing graduate student with high academic standing in Chemistry with interests in conducting research in Environmental Chemistry relating to pollution control. Areas could include identification, removal and substitution of environmentally harmful chemicals, be they naturally occurring or of industrial and agricultural origin (e.g., polyphenols, dions, dirtepenes, insecticides, herbicides, fungicides, industrial pollutants, heavy metal sequestering, etc.). Selection of the recipient will be made by the Graduate Faculty Admissions and Awards Committee on the recommendation of a committee comprising of two elected faculty members of the Department of Chemistry.

This award may be renewed for a second year on recommendation of the Committee.

THE PHILIP K.H. WONG SCHOLARSHIP — A scholarship of $500 or more may be awarded to a full time graduate student who is in a Master's program or Ph.D. program in the Department of Geography and whose research work is related to China or Overseas Chinese. The amount of the scholarship is to be determined by the Department of Geography and will be based on the student's academic standing. Selection will be made by the Faculty of Graduate Studies Awards Committee on the recommendation of the Department of Geography. If no graduate students are eligible for the scholarship, an award of $100 may be made to an undergraduate student in the Department of Geography on the basis of high standing in Geography 464B. Selection will be made by the Senate Committee on Awards on the recommendation of the Department of Geography.

THE MAY YUEN MEMORIAL SCHOLARSHIP — A scholarship of $300 or more may be awarded to a full-time graduate student who is in a Master's program or a Ph.D. degree program in the Department of Geography, and whose research work is related to China or Overseas Chinese. The amount of the scholarship is to be determined by the Department of Geography in consultation with the student's supervisor and will be based on the student's academic standing.

Selection will be made by the Faculty of Graduate Studies Awards Committee on the recommendation of the Department of Geography. If no graduate student is eligible for the scholarship, an award of $100 may be made to an undergraduate student in the Department of Geography on the basis of high standing in Geography 464A. Selection will be made by the Senate Committee on Awards on the recommendation of the Department of Geography.

SPECIAL RESEARCH AWARDS

B.C. GRADUATE RESEARCH ENGINEERING AND TECHNOLOGY AWARDS — The G.R.E.A.T. awards are cooperative awards to encourage research collaboration between universities, business and industry in British Columbia. Available to help support graduate students at B.C. universities in Applied and Natural Sciences who are Canadian citizens. All B.C. organizations, public and private, are eligible to participate, provided that research can be arranged which is acceptable to both the organization and the University. G.R.E.A.T. awards may be held in conjunction with other major awards such as NSERC Postgraduate Scholarships. Valued at $20,000 less the value of all other Scholarships held concurrently, up to a maximum G.R.E.A.T. award of $16,000 per year.

B.C. SCIENCE & TECHNOLOGY AWARDS FOR RETURNING STUDENTS — The S.T.A.R.S. awards are competitive Scholarships to enable mature students (minimum 3 years related experience since graduation) to return to a B.C. university for a graduate degree in Science or Engineering. Recipients will also maintain a collaborative research arrangement with an industrial organization in B.C. Successful applicants will receive $25,000 per year (1990/91). Three S.T.A.R.S. awards will be awarded. Applicants must be Canadian citizens or permanent residents. Application forms are available in the Graduate Dean's Office for both the G.R.E.A.T. and S.T.A.R.S. awards, and completed forms must be returned to that Office no later than January 15.

THE SARA SPENCER FOUNDATION RESEARCH AWARDS IN APPLIED SOCIAL SCIENCE — These awards are intended to encourage Social Scientists in cultural, environmental, and social studies, with particular reference to the Capital Regional District. The proceeds of a fund established by the Sara Spencer Foundation and administered by the University of Victoria Foundation will be used to provide individual awards in amounts up to a maximum of $3,000 to superior students, to assist with the costs of research in the applied areas of the Social Sciences. The award will normally only be given to support research which is directly related to the student's thesis or dissertation and has

*Administered by the University of Victoria Foundation.

been approved by the student's supervisory committee. Awards will be made by the Awards Committee of the Faculty of Graduate Studies on the recommendation of the Sara Spencer Committee which is composed of members from the Social Sciences Departments.

ASSISTANTSHIPS

Graduate students may make application, through the Department concerned, for paid employment as Academic Assistant, Research Assistant, Scientific Assistant, Laboratory Instructor. Such employment is negotiated through the Department concerned, not through the Faculty of Graduate Studies, at rates of pay determined by the University. No full time graduate student may be gainfully employed, however, for more than 150 hours in any four month term. Students appointed as Teaching and/or Research Assistants may also be recommended by their departments to the Faculty of Graduate Studies for a Supplement.

Awards for which Application must be made to the Administrative Registrar:

* THE SENATOR WILLIAM JOHN MACDONALD TRAVELLING SCHOLARSHIP — This award was established by Mrs. T.G. Keir in memory of her grandfather, Senator Macdonald.

The scholarship is awarded every second year, beginning in 1984, to an outstanding student who has received an undergraduate degree from the University of Victoria since the last competition and who is planning to undertake a graduate degree in Arts, Science or Fine Arts at a Scottish university. If there are not suitable candidates wishing to study at a Scottish university, then applicants wishing to attend any United Kingdom university will be considered.

The award will have a value of $11,000, and will be payable in two $5,500 installments; one for each of the first two years of the student's graduate program.

Application packages are available from the Secretary of the Senate Committee on Awards, Office of the Administrative Registrar, University Centre. The application package includes three referee forms to be completed by individuals who are familiar with the applicant's work. The application form and the referee forms must all be submitted by November 30.

The selection of the recipient will be made by a Committee, appointed by the President, which is composed of a Dean of one of the Faculties, an individual of professional rank and the Chairman of the Senate Committee on Awards. Decisions reached by the Committee are final.

Awards are made after the results of the final examinations for the relevant winter session have been determined.

Awards Administered by Government and Other Organizations

There are many other graduate awards not administered by the University of Victoria. Notices of these are posted in the Faculty of Graduate Studies Office and circulated to departmental offices. Information may also be obtained from the catalogue "Canadian Directory of Awards for Graduate Study" which can be found in the Reference Division of the Library under REF/LB2339/C3 C33. Since these awards are subject to constant change, prospective applicants are advised to obtain further details from the Faculty of Graduate Studies Office, or directly from the administering agency. A brief description of some of the major awards follows:

SOCIAL SCIENCES AND HUMANITIES RESEARCH COUNCIL

Doctoral Fellowships and The Queen's Fellowships

Field of Study: Various areas of the humanities or social sciences.

Eligibility: Canadian citizens who, by the time of taking up the award, will have completed

a. one year of doctoral study, or its equivalent; and
b. a Master's degree, and will be pursuing full time studies leading to a Ph.D. or equivalent.

Value: Up to $13,356. Deadline: November 20.

Information and applications for these awards are available from the Office of the Dean of Graduate Studies. Application for Post Doctoral awards are available from the Office of Research Administration.

NATURAL SCIENCES AND ENGINEERING RESEARCH COUNCIL OF CANADA — Postgraduate awards and a limited number of Fellowships are available in the fields of science, including physical geography and experimental psychology. Candidates must be Canadian citizens or landed immigrants resident in Canada. These Scholarships and Fellowships are awarded on the basis of high scholastic achievement and evidence of skill at research.

Postgraduate Scholarships

Postgraduate scholarships are valued at $14,000 or $15,600 for 12 months.

Additional information on NSERC awards may be obtained from the Office of the Dean of Graduate Studies. Application forms are made available through Departmental Offices in early October. The deadline for return of completed applications to the Chairman of the appropriate Department is usually early November.

ASSOCIATION OF UNIVERSITIES AND COLLEGES OF CANADA — The Association of Universities and Colleges of Canada administers a number of national and international programs on behalf of Canadian and foreign donors. A comprehensive list of awards, including those offered by foreign governments for study abroad, is available from the Association and many are posted in the Office of the Dean of Graduate Studies.

General Eligibility: Unless otherwise indicated, these awards are offered to graduates of a Canadian university or college which is a member or affiliated to a member of the A.U.C.C., and are tenable at a similar institution.

Conditions of awards, closing dates and other factors vary, and those meeting the general eligibility requirements should write to the Director of Awards, A.U.C.C., 151 Slater Street, Ottawa, Ontario K1P 5N1, for more complete information and application forms.

BRITISH COLUMBIA HERITAGE TRUST SCHOLARSHIPS — The British Columbia Heritage Trust offers three Scholarships annually, in the amount of $7,500 each:
Charles E. Borden Scholarship, for the study of B.C. archaeology;
Peter N. Cotton Scholarship, for the study of architectural conservation or the architectural history of British Columbia;
Willard E. Ireland Scholarship, for the study of B.C. history and archival studies.
Letters of application and application material must be submitted by December 31 to:

The Secretary
British Columbia Heritage Trust
Parliament Buildings
Victoria, B.C. V8V 1X4

Further information concerning these awards may be obtained from the above address or from the office of the Dean of Graduate Studies.

CANADIAN FEDERATION OF UNIVERSITY WOMEN FELLOWSHIPS

Margaret McWilliams Pre-Doctoral Fellowship

One Fellowship awarded annually to a woman scholar in any field of study who has completed at least one year of a doctoral program at the time of application.

Value: $8,000.

Professional Fellowship

One or two Fellowships are awarded for any woman who wishes:

a. to spend a year at an accredited Library School, School of Social Work or similar professional school, or
b. to embark on a program leading to an advanced degree after some years of experience in a particular field, or a lapse of time away from formal study.

Value: $4,000

Applicants for these awards must hold at least a Bachelor's degree or equivalent from a recognized university.

Further information about these two awards may be obtained from the Canadian Federation of University Women, 55 Parkdale Avenue, Ottawa, Ont., K1Y 1E5.

CANADA MORTGAGE AND HOUSING FELLOWSHIPS — A large number of Fellowships are awarded annually for study in urban and regional planning and related fields, in approved Canadian universities and elsewhere. Candidates must be Canadian citizens or landed immigrants in Canada for not less than 18 months when applying.

Value: up to $13,200. Renewable up to three times.

Application forms are available from the Office of the Dean of Graduate Studies or the Administrative Officer, Scholarships, Canada Mortgage and Housing Corporation, Ottawa, Ontario K1A 0P7, and must be submitted through the appropriate department of the university in which the student proposes to enroll. Applications for study at

*Administered by the University of Victoria Foundation.

Canadian universities must be sent to CMHC by March 15; applications should be submitted to the University, therefore, well before the end of February.

COMMONWEALTH SCHOLARSHIP AND FELLOWSHIP PLAN — Under a Plan drawn up at a conference in Oxford, in 1959, each participating country of the Commonwealth offers a number of scholarships to students from other Commonwealth countries. These scholarships are mainly for graduate study and are tenable in the country making the offer. Awards are normally for two years and cover travel costs, tuition fees, other university fees and a living allowance.

Details may be obtained from the relevant government office in the applicant's own country, or from the Canadian Commonwealth Scholarship and Fellowship Committee, c/o Association of Universities and Colleges of Canada, 151 Slater Street, Ottawa, Ontario K1P 5N1.

CANADIAN INTERNATIONAL DEVELOPMENT AGENCY AWARDS

CIDA offers scholarships to qualified Canadians to enhance their professional competence in any aspect of international development assistance. Applications involve the proposal of a program related to some specific developmental need or problem providing for a substantial period of work, observation, or research in a developing country. The program may be up to two years duration, the award for the second year being dependent on satisfactory review. Only Canadian citizens are eligible, and must clearly indicate their intention to pursue a career in the international development field. The awards, in a maximum amount of $25,000 per year; are tenable in Canada and/or in developing countries.

Applications should be received by CIDA by January 31. Forms and further details may be obtained from Canadian International Development Agency, Scholarship Program for Canadians, Human Resources Division, 122 Bank St., Ottawa, Ontario K1A 0G4.

DEPARTMENT OF NATIONAL DEFENCE SCHOLARSHIPS AND POST DOCTORAL FELLOWSHIPS — The Department of National Defence offers Scholarships and Post Doctoral Fellowships for military and strategic studies of relevance to Canada. Applicants must be Canadian citizens. Candidates for a Fellowship must hold a Ph.D. degree, or equivalent, and candidates for a Scholarship must hold an Honour's Bachelor's degree, or its equivalent.

Value: Fellowships $10,000, Scholarships $7,500.

Application forms are available from the office of the Dean of Graduate Studies and must be submitted by February 1.

IODE DOCTORAL SCHOLARSHIPS — Seven to nine scholarships are offered annually to students who, at the time of applying, hold or are currently in the final year of studies leading to a Master's degree, and are not more than 35 years of age on December 31 of the year in which the award would be received. Candidates must be Canadian citizens.

Value: $8,500 for study in Canada; $12,000 for study overseas within the Commonwealth. If warranted by the student's program, one renewal may be considered in the amount of $4,000 in Canada and $6,000 overseas.

Information and application forms are available from the Office of the Dean of Graduate Studies. Deadline for receipt of applications is December 1.

NATIONAL INSTITUTE ON MENTAL RETARDATION — The National Institute on Mental Retardation offers Research Grants of up to $8,000 and Bursaries of up to $1,500 to graduate students doing research in fields relating to human services and mental retardation. Candidates must be Canadian citizens or landed immigrants, studying at Canadian universities.

Research Grants: Application forms and information are available from the Office of the Dean of Graduate Studies or from The Secretary, Bursaries and Grants Adjudicating Committee, National Institute on Mental Retardation, Kinsmen NIMR Building, York University Campus, 4700 Keele Street, Downsview, Ont., M3J 1P3. Deadline: April 30.

Bursaries: Application should be made, in the form of an outline of intended or current area of study; a proposal of research plan; letters of reference and transcripts, to B.C. Association for the Mentally Retarded, Airport Square, No. 155, 1200 West 73rd Ave., Vancouver, B.C., V6P 6G5. Deadline: March 30.

MONSANTO CANADA SCHOLARSHIP IN WEED SCIENCE — A $1,800 scholarship is open to any graduate student who has completed (by September 1) one or more years of graduate studies toward an M.Sc. or Ph.D. in weed research. The thesis project must be on weed control, herbicide chemistry, application technology, weed physiology, weed biology or weed ecology.

It is tenable at a University in Western Canada and will be awarded on the basis of academic performance at the graduate and undergraduate level and demonstrated aptitude and experience in conducting research at the graduate level. Publications, presentation, communication skills and related extension experiences will be considered.

Letters of application should include a brief outline of the research project and its significance to weed control in western agriculture. Also include a transcript of marks, curriculum vitae and two letters of reference (one must be from the project supervisor). Send, before September 1, to Dr. J.H. Hunter, Monsanto Scholarship, Agriculture Canada Research Station, Box 440, Regina, Saskatchewan, S4P 3A2.

QUEEN ELIZABETH II BRITISH COLUMBIA CENTENNIAL SCHOLARSHIP — The purpose of this Scholarship is to enable selected British Columbians to take further studies at approved universities in the United Kingdom.

Number and Value: One Scholarship each year of $10,000 renewable.

Eligibility: A graduate of the University of Victoria, University of British Columbia or Simon Fraser University:

a. who has attended any British Columbia public university for a minimum of 2 years;
b. whose ordinary domicile, home or residence is in B.C.;
c. who is a Canadian citizen.

Applications are available in the Office of the Dean of Graduate Studies. All inquiries, applications and supporting documents must be forwarded directly to The Deputy Provincial Secretary, Legislative Building, Victoria, B.C., by March 15.

THE J.H. STEWART REID MEMORIAL FELLOWSHIP — Open to graduate students in any field at a Canadian University, who are Canadian citizens.

Value: $5,000, renewable, *Deadline:* February 28.

Information and forms available from: Awards Officer, Canadian Association of University Teachers, 75 Albert St., Suite 1001, Ottawa, Ontario, K1P 5E7.

ROTARY GRADUATE FELLOWSHIPS — Graduate Fellowships may be awarded for any field of study. The purpose of the awards is to promote understanding and friendly relations between peoples of different nations. Candidates must have both an outstanding academic record and the potential to become high quality ambassadors of good will. Applicants must be between the ages of 20 and 28, inclusive, as of the application deadline of March 1, unless that age period included military service, in which case the upper age limit may be waived. Candidates must hold a bachelor's degree, or its equivalent, prior to the commencement of the Fellowship year.

The Fellowship is calculated on the basis of air fare between the recipient's residence and place of study, incidental travel expenses, tuition fees, essential books and supplies, and room and board, plus incidental living expenses.

Application for a Rotary Foundation Graduate Fellowship must be made through a Rotary Club in the district of the applicant's legal or permanent residence, or in the district in which he is studying at the time of application. A period of 18 months is required for processing. Further details may be obtained from Student Financial Aid Services.

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Larry D. Yore, B.S., M.A., Ph.D. Term expires May 1993

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George S. Pringle. Term expires April 1992

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Anthony Welch, B.A., M.A., Ph.D., Dean, Faculty of Fine Arts

Alexander McAuley, B.Sc., Ph.D., D.Sc., C.Chem., M.R.S. Chem., Dean, Faculty of Graduate Studies (to June 30, 1991)

James C. McDavid, B.A., M.A., M.A., Ph.D., Dean, Faculty of Human and Social Development

Maureen A. Maloney, LL.B., LL.M., Dean, Faculty of Law

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Margaret C. Swanson, B.A., B.L.S., University Librarian

Elected by the Individual Faculties:

Arts and Science:

Danielle Thaler, B.A., M.A., Ph.D. Term expires June 30, 1993

Paul R. West, B.Sc., Ph.D. Term expires June 30, 1992

Education:

R. Anne McLaughlin, B.Com., M.S. Term expires June 30, 1992

Beverly A. Timmons, B.A., M.S., D.Ed. Term expires June 30, 1993

Engineering:

Sadik Dost, B.Sc., M.Sc., Ph.D., P.Eng. Term expires June 30, 1993

D. Michael Miller, B.Sc., M.Sc., Ph.D. Term expires June 30, 1992

Fine Arts:

Harald M. Krebs, B.Mus., M.Phil, Ph.D. Term expires June 30, 1993

Elizabeth Tumasonis, B.A., M.A., Ph.D. Term expires June 30, 1992

Graduate Studies:

David Docherty, B.S., M.S., Ph.D. Term expires June 30, 1992

Wesley Wooley, A.B., A.M., Ph.D. Term expires June 30, 1993

Human and Social Development:

James J. MacRae, B.A., M.A., Ph.D. Term expires June 10, 1992

Jochen R. Moehr, Staatsexamen, Dr. med., Habilitation Medizinische Informatik. Term expires June 30, 1992

Law:

John N. Davis, LL.B., M.L.S. Term expires June 30, 1992

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Members Elected by the Faculty Members:

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James Cutt, M.A., M.A., Ph.D. Term expires June 30, 1992

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Patrick J. Grant, B.A., D.Phil. Term expires June 30, 1994

Joseph F. Kess, B.S., M.A., Ph.D. Term expires June 30, 1992

David J. Leeming, B.Sc., M.A., Ph.D. Term expires June 30, 1994

Reginald H. Mitchell, B.A., M.A., Ph.D. Term expires June 30, 1994

Charles E. Picciotto, A.B., M.A., Ph.D. Term expires June 30, 1993

Richard J. Powers, B.A., M.A., Ph.D. Term expires June 30, 1994

T. Rennie Warburton, B.A., Ph.D. Term expires June 30, 1993

Members Elected by the Student Association:
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David E. Gramlich
Claire T. Heffernan
Julie L. Hewlett
Rachel K. Iwaasa
Douglas D. Moore
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David Wheatcroft

Part Time Student:

Brian Kelcey. Term expires April 30, 1992

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(Term expires December 31, 1993)
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Laura Bramly, B.Bus.Mgt. (Ryerson), Program Assistant - Computer Based Information Systems

Marilyn Brown, B.A. (Wat.), Program Assistant - Health Sciences

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Christina Gambrell, Program Assistant — Language Programs

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W. (Trudy) Hadley, Program Assistant — Public Administration

Reta Lee Harrison, B.A., M.Sc., M.Sc. (Syr.), Program Coordinator — Distance Education

Fiona M. Hyslop, Manager, Conference Services

Bronwyn Jenkins, B.A. (U. of Vic.), Program Assistant - English Language Programs

Wes J. Koczka, B.A., B.Ed., M.Ed. (Sask.), Program Coordinator — Education Extension

Heather A. Kucheran, B.A.Sc. (Leth.), Program Coordinator — Public Administration

Brishkai Lund, B.A. (San Diego St.), M.A. (Wash.), Senior Program Coordinator, Arts and Science, Women's and Seniors' Programs

Robert Martin, B.S.W., M.P.A. (U. of Vic.), Program Coordinator — Child and Youth Care

Thomas J. Miller, B.Comm., B.Ed., (St.F.X.), M.Ed. (U. of Vic.), Program Coordinator - Education Extension

D. Dianne Morrow, B.Sc.N. (Sask.), M.Ed. (S. Fraser), Ph.D. (La Jolla), Program Coordinator — Distance Education

Jeanette Muzio, B.Sc. (Nott.), L.T.C.L. (Lond.), Program Coordinator — Computer Based Information Systems and Engineering Extension

Mary Ransberry, Conference Officer

Douglas K.H. Reed, B.A., M.A. (Tor.), M.Phil. (Oxon.), Program Assistant - English Language Programs

Elinor J. Rhynas, B.A., Dip.Ed., M.A. (U. of Vic.), Program Coordinator — English Language Programs

Katharine Seaborne, B.A., M.Ed. (U. of Vic.), M.A. (Northw.), Manager — Distance Education Services

Alexander L. Slade, B.A. (U. of Vic.), B.L.S., M.L.S. (Brit. Col.), Coordinator of Extension Library Services

Judith E. Somers, B.A. (Wash.), Distance Education Specialist

Vernon J. Storey, B.Ed., M.Ed., Ed.D. (Brit. Col.), Director, Education Extension

Marion H. Voelkel, Distance Education Specialist

Rhordon D. Wikkramatileke, B.A., M.P.A. (U. of Vic.), Senior Program Coordinator — Public Administration, Business and Management Programs

Gail Woods, B.F.A. (U. of Vic.) Promotion and Publications Officer

OFFICE OF THE VICE PRESIDENT, ADMINISTRATION

J. Trevor Matthews, B.A. (Brit. Col.), M.B.A. (Stan.), Vice President, Administration

Alfred Fischer, B.Sc., M.Sc., Ph.D. (N.Z.), Associate Vice-president, Administration

Buildings and Grounds:

James F. Helme, B.A.Sc. (Brit. Col.), P.Eng., Director

Colin Butterfield, Manager, Janitorial, Mail and Messenger Services

Douglas W. Hull, B.Sc. (Wisc.), Projects Officer, Maintenance

Anthony J. James, Manager, Grounds

Kenneth G. Marrison, Assistant Manager, Security

Donald J. Marykuca, Manager, Traffic, Security, and Motor Pool

James M. Pearce, B.Eng. (McG.), P.Eng., Manager, Maintenance

Campus Planning:

Gerald A. Robson, B.Sc. (Alta.), P.Eng., Director

Victor J. Golinsky, Manager, Projects

Donald W. Lovell, B.A. (R.M.C.), M.Arch. (Man.), Manager, Design

Computing and Systems Services:

Herbert R. Widdifield, B.A. (R.M.C.), Director

Douglas A. Alexander, B.Sc. (U. of Vic.), M.Sc. (N. Car.), Operations Manager, Computing Services

Robert C. Allen, B.Sc., (Brit. Col.-Vic. Coll.), M.Sc. (U. of Vic.), Systems Manager, Computing Services

Steven J. Banner, B.Sc. (U. of Vic.), Programmer

Arthur C. Brett, B.S. (Kan.), Ph.D. (Missouri), Manager, Computing User Services

Robert W. Carson, Programmer Analyst

Richard Chadwick, Programmer

Vincent J. Connor, B.Sc. (Belf.), M.Sc. (Lond.), Programmer Analyst

Herbert D. Fox, Network Coordinator

Brenda Gerth, Programmer/Consultant

Daniel C. Gillett, B.Sc. (U. of Vic.), Senior Programmer Analyst

Moira Glen, B.Sc. (Lond.), Senior Programmer Analyst

Lance A.N. Grant, B.Sc. (U. of Vic.), Programmer/Consultant

Ise Henin, B.F.A. (U. of Vic.), Programmer Analyst

Merrilee H. Hoen, B.Sc. (Brit. Col.), Senior Programmer Analyst

John E. Holland, B.Sc. (U. of Vic.), Programmer

Angela Hong, Programmer Analyst

Kenneth T. Howard, B.A. (Guelph), Senior Programmer Analyst

Vance S. Johnson, B.Sc. (Man.), Senior Programmer Analyst

M. Glenn Jorgensen, Senior Programmer Analyst

Michael J. Keating, B.Sc. (U. of Vic.), Senior Programmer Analyst

John W. King, B.Sc. (U. of Vic.), Senior Programmer Analyst

Paul A. Kissinger, B.Sc. (U. of Vic.), Senior Analyst

Melvin D. Klassen, B.Sc. (U. of Vic.), Senior Programmer Analyst

Patrick R. Konkin, B.Sc. (U. of Vic.), Statistical Analyst

Anne Knudsen, Programmer

Kim Lewall, Programmer

Colin R. Leavett-Brown, Senior Programmer Analyst

Agnes M.J. Lynn, B.Sc. (U. of Vic.), Senior Programmer Analyst

Kenrick I. McGowan, B.A., M.P.A. (U. of Vic.), Data Administrator

Janice D. Miers, B.Sc. (U. of Vic.), Programmer/Consultant

Martin T. Milner, B.Sc. (U. of Vic.), Senior Programmer Analyst

Paul Molyski, B.Sc. (Brit. Col.), Senior Analyst

Michael P. Motek, B.Sc. (U. of Vic.), Senior Programmer Analyst

Douglas J. Pelton, B.Sc. (U. of Vic.), Systems Programmer

Erica J. Price-Edney, Programmer Analyst

Kevin D. Rintoul, B.Sc. (U. of Vic.), Programmer Analyst

Richard C. Rutherford, Microcomputer Laboratory Coordinator

N. Paul Sales, B.Sc. (Lond.), Senior Programmer Analyst

Mary E. Sanseverino, B.Sc. (U. of Vic.), Programmer/Analyst, Software Development

Barry S. Smith, B.Sc. (Lake.), Senior Analyst

Joseph D. Sparrow, Senior Programmer Analyst

David Stothard, B.A. (Brit. Col.), M.P.H. (Minn.), Associate Director, Computing Services

Philip J. Sumsion, Network and Technical Services Manager, Computing Services

Robert J. Tapp, B.Sc. (U. of Vic.), M.A.Sc. (Brit. Col.), P.Eng., Senior Programmer Analyst

Allan D. Trumpour, B.Sc. (U. of Vic.), Senior Programmer Analyst

Alan Tweedale, B.Sc. (Manc.), Ph.D. (Sus.), Assistant Director, Software Development

Samuel K.P. Wong, B.Sc. (H.K.), M.Sc., Ph.D. (Brit. Col.), Senior Analyst

Rudy Zittlau, B.A., B.Sc. (Alta.), Senior Programmer Analyst

Maltwood Art Museum and Gallery:

Martin J. Segger, B.A., Dip.Ed. (U. of Vic.), M.Phil. (Warburg, Lond.), F.R.S.A., Curator and Director

Student and Ancillary Services:

James F. Griffith, B.A. (St. Dun.), M.Ed. (Ott.), Director

David Clode, B.Ed. (U. of Vic.), Associate Director

Athletics and Recreational Services

Wayne MacDonald, B.P.E. (Dal.), M.H.K. (Windsor), Manager

James D. Hays, B.A. (West. Wash.), Coordinator, Physical Education, Athletics and Recreational Facilities; Coordinator, Aquatics and Intramural Sports

Winona G. Pugh, B.Rec. (Brit. Col.), Coordinator, Recreation Services

Harry J. Zarins, B.Ed., M.Ed. (McG.), Coordinator, Athletics

Bookstore

Gertraude Martin, Manager

Maurice N. Lizin, Assistant Manager — Operations

Linda A. Maasch, B.A. (Missouri), Assistant Manager — Merchandising

Chaplains Services (offered in cooperation with local denominations)
The Reverend David Widdicombe, B.A., M.Div. (Anglican)

Sandra Lucier (Roman Catholic)

Counselling Services

Robert C. Willihnganz, B.A. (Calif. St. Coll.), Ph.D. (Tex.), Manager

Mary Jane McLachlan, B.A., B.Ped., B.Ed., M.Ed. (Man.), Counselling Psychologist

Joel Newman, B.S., M.S. (Wis.), Ed.D. (Wash. St.), Counselling Psychologist

Joseph A. Parsons, B.A. (Utah), M.A., Ph.D. (Ill.), Coordinator, Learning Skills Program

Food Services

Horst Mann, C.G.A., Manager

Ina Bureau, Assistant Manager

Dale Ede, B.A. (U. of Vic.), Administrative Officer

Thomas F. Knodell, Production Coordinator

Nathan P. Kushnir, Catering Coordinator

Health Services

John E. Petersen, M.D. (Alta.), Medical Director

Richard Backus, B.Sc., M.D. (Alta.), General Practitioner (part time)

Michael C. Bassett, B.Sc. (U. of Vic.), M.Sc., M.D. (Brit. Col.), General Practitioner (part time)

Elspeth J. Charsley, B.H.E. (Brit. Col.), Nutritionist Consultant (part time)

William H. Dyson, B.Sc. (Moravian Coll.), M.A., Ph.D. (Kan.), M.D. (McM.), General Practitioner (part time)

Christine Gerbis, M.D. (W. Ont.), General Practitioner (part time)

M.A. Ruth Gibson, M.D. (Queen's, Belf.), M.R.C.G.P. (Ireland), General Practitioner (part time)

Elisabeth I. Jirik, B.Sc. (U. of Vic.), M.D. (Brit. Col.), General Practitioner (part time)

Robert McDonald, M.D. (Calg.), General Practitioner (part time)

Keith McQueen, B.Sc., M.D. (Brit. Col.), General Practitioner (part time)

Danielle Pastierovic, B.Sc. (Tor.), M.D. (McM.), General Practitioner (part time)

Stephen Parker, B.Sc. (W. Ont.), B.Sc. (U. of Vic.), Physiotherapist Trainer

Mary Ellen Rogers, M.D. (Tor.), General Practitioner (part time)

Housing and Conference Services

Gavin Quiney, Teaching Dip. (Lough.), B.Ed. (U. of Vic.) Manager

Leigh W. Andersen, Coordinator, Residence Facilities and Housekeeping Services

Marc P. Gaucher, B.Ed. (U. of Vic.)

Student Financial Aid Services

Nels I. Granewall, B.A. (U. of Vic.), Manager

Robin J. MacLeod, B.A. (Brit. Col.), Financial Aid Officer

Lori L. Nolt, B.Sc. (Alta.), Financial Aid Officer

Supply and Technical Services:

Printing and Duplicating Services

E. Russell Smith, Manager

University Centre Auditorium:

Martin J. Segger, B.A. Dip.Ed. (U. of Vic.), M.Phil. (Warburg, Lond.), F.R.S.A., Manager

OFFICE OF THE VICE PRESIDENT, DEVELOPMENT AND EXTERNAL RELATIONS

Halliday L. Spelliscy, Vice President, Development and External Relations

Shirley Lyon, Secretary

Development and Alumni Relations:

Kayla Stevenson, B.A. (W. Mich.), Director

Allan R. Berezny, B.A., M.A. (McG.), M.P.A. (Queen's), Development Officer

Birgit M. Castledine, B.A. (Tor.), Development Officer

Robin Marcellus, B.A. (Ryerson), Development Coordinator

Public Relations and Information Services:

Evelyn Samuel, B.A., Dip.Ed. (Alta.), Director

A. Bruce Kilpatrick, B.A. (U. of Vic.), Information Officer

Donna Danylchuk, B.A. (McG.), B.J. (Car.), Information Officer

Robie Liscomb, B.A. (Tufts), M.A. (Hollins), Information and Public Relations Officer

Patricia Pitts, Dip. de Langue Française (U. of Vic.), Information Officer

OFFICE OF THE VICE PRESIDENT, FINANCE

Robert W. McQueen, B.Com. (Brit. Col.), C.A., Vice President, Finance

Mary Anne Gotaas, B.Sc. (Alta.), C.G.A., Financial Assistant

Accounting Services:

Robert M. Worth, B.A. (U. of Vic.), C.A, Director

Dennis G. Davis, Associate Director

Murray A. Griffith, B.A. (U. of Vic.), Assistant Accountant

John R. Levey, M.P.A. (U. of Vic.), C.A., Financial Accountant

Frederick W. Marshall, B.Ed. (U. of Vic.), C.G.A., Financial Accountant

Internal Audit:

Brian H. Atwell, F.C.A. (England and Wales), Director

Purchasing Services:

George M. Smith, Manager

EMERITUS FACULTY AND STAFF AND HONORARY DEGREE RECIPIENTS

PRESIDENT EMERITUS (1990)

Howard E. Petch, B.Sc., M.Sc., Ph.D., D.Sc., LL.D., F.R.S.C.

UNIVERSITY LIBRARIAN EMERITUS (1988)

Dean W. Halliwell, B.L.S., M.A.

EMERITUS FACULTY

Jane A. Abramson, B.A., M.A., Social Work (1982)

Oliver M. Abrioux, L.ésL., D.E.S., Ph.D. French Language and Literature (1987)

Jeanne E. Adam, L. ès L., D. de IIIe cycle, French Language and Literature (1989)

Lionel Adey, B.A., M.A., Ph.D., Cert.Ed., English (1990)

Robert D. Armstrong, B.Ed., B.A., M.Ed., Ed.D., Communication and Social Foundations (1988)

J. Douglas Ayers, B.A., B.Ed., Ph.D., Psychological Foundations in Education (1983)

Howard B. Barnett, A.R.C.T., B.A., Mus.Bac., M.A., Ph.D., Music (1973)

Walter M. Barss, B.A., M.A., Ph.D., Physics (1982)

Alex Bavelas, B.S., M.A., Ph.D., Psychology (1979)

Horace D. Beach, B.S.A., B.A., M.A., Ph.D., Psychology (1984)

Anthony H. Birch, B.Sc., Ph.D., F.R.S.C., Political Science (1989)

Roger J. Bishop, B.A., B.L.S., M.A., English (1971)

Leon Bowden, B.Sc., B. Litt., Ph.D., Mathematics (1983)

Ian L. Bradley, B.Ed., M.Ed., Ed.D., Art and Music Education (1987)

George A. Brand, B.A., M.Ed., Education (1969)

Winnett A. Brand, Education (1966)

John C. Cawood, B.Ed., M.Ed., M.F.A., Art and Music Education (1986)

David J. Chabassol, B.A., B.Ed., M.Ed., Ph.D., Psychological Foundations in Education (1988)

Kathleen M. Christie, B.A., M.A., Education (1974)
John L. Climenhaga, B.A., M.A., Ph.D., Physics (1982)
William K. Cross, B.Ed., M.A., Ed.D., Social and Natural Sciences (1989)
Jean D. Dey, B.Ed., M.Ed., Ed.D., Education (1981)
Gwladys V. Downes, M.A., Doct. de l'Un., French Language and Literature (1979)
John D. Eckerson, B.S., M.A., Ph.D, Physical Education (1986)
P. Mamilian H. Edwards, B.A., M.A., Ph.D., French Language and Literature (1980)
Edgar S. Efrat, B.A., M.A., Ph.D., Political Science (1989)
Wilma E. Elias, B.A., M.A., Ph.D., Chemistry (1985)
Jessie B. Fleming, B.A., Education (1968)
Esme N. Foord, B.A., M.A., Ed.D., Arts and Science (1975)
Gerhart B. Friedmann, B.Sc., M.A., Ph.D., Physics and Astronomy (1990)
William H. Gaddes, M.A., Ph.D., Psychology (1978)
Sidney G. Gibbins, B.S., Ph.D., Chemistry (1987)
Charlotte S.M. Girard, B.A., M.A., Ph.D., History (1988)
Cary F. Goulson, B.A., M.A., Ph.D., Social and Natural Sciences (1988)
Alan Gowans, M.A., M.F.A., Ph.D., History in Art (1988)
Robert F. Gray, M.D., M.A., Ph.D., Anthropology (1977)
David A. Griffiths, B.A., M.A., Doct. de l'Un., Lauréat de l'Acad., French Language and Literature (1985)
Siri Gunasinghe, B.A., D.U., History in Art (1988)
Robert B. Hagedorn, B.A., M.A., Ph.D., Sociology (1991)
Edwin M. Hagmeier, B.A., M.A., Ph.D., Biology (1987)
Nora E. Haimberger, B.A., M.A., Ph.D., Germanic Studies (1983)
John F. Hall, A.B., M.S., Ph.D., Social and Natural Sciences (1987)
Dean W. Halliwell, B.L.S., M.A., University Librarian
John S. Hayward, B.Sc., Ph.D., Biology (1990)
Maureen C. Hibberson, B.P.E., M.A., Physical Education (1991)
W. Harry Hickman, M.A., Doct. de l'Un., LL.D., Ch. de la Légion d'Honneur, French Language and Literature (1974)
Gordon N. Hobson, B.A., M.A., Ph.D., Pyschology (1986)
Edgar B. Horne, B.A.Sc., B.A., M.A., Ph.D., Social and Natural Sciences (1987)
Howard J.N. Horsburgh, M.A., B.Litt., B.Sc., Philosophy (1984)
Charles H. Howatson, B.A.. M.A., Geography (1983)
Herbert H. Huxley, M.A., Classics (1982)
Sydney W. Jackman, B.S., M.A., A.M., Ph.D., D.Litt. (Hon.), F.S.A., F.R.Hist.S., History (1990)
Jaroslav Karlovsky, Artist's Dip., Artist's Dip., Music (1990)
D. Elizabeth Kennedy, B.A., M.A., Hon. LL.D., Mathematics (1985)
A. Richard King, B.A., Ph.D., Communication and Social Foundations (1985)
Arthur Kratzmann, B.Ed., M.Ed., Ph.D., Communication and Social Foundations (1986)
Frederick Kriegel, 2nd State Cert., Germanic Languages and Literature (1970)
Jan Kupp, B.A., M.A., Ph.D., History (1979)
Burton O. Kurth, B.A., Ph.D., English (1985)
Chester L. Lambertson, M.A., Ph.D., English (1976)
Robert G. Lawrence, M.A., Ph.D., English (1985)
Roy F. Leslie, B.A., M.A., Ph.D., English (1987)
Jean Letourneau, Dip., Music (1986)
Samuel L. Macey, B.A., Ph.D., F.M.S. English (1987)
Donald J. MacLaurin, B.A.Sc., M.S., Ph.D., P.Eng., Chemistry (1973)
J. Beattie MacLean, B.A., M.A., Ph.D., Germanic Languages and Literature (1973)
Fred. L. Martens, B.A., B.Ed., M.S., Ph.D., Physical Education (1982)
Geoffrey P. Mason, B.A., M.A., Ph.D., Psychological Foundations in Education (1984)
Frederick Mayne, B.A., Ph.D., English (1979)
Barbara McIntyre, B.A., M.A., Ph.D., Theatre (1981)
R. Anne McLaughlin, B.Com., M.S., Physical Education (1991)
John McLeish, B.Sc., Ed.B., M.Ed., Ph.D., Psychological Foundations in Education (1982)
G. Grant McOrmond, C.D., M.A., English (1987)
Malcolm A. Micklewright, B.A., Ph.D., Geography (1986)
Richard H.J. Monk, B.A., M.Ed., Ph.D., Communication and Social Foundations (1979)
O. Phoebe Noble, B.A., Mathematics (1978)
Robert N. O'Brien, B.A.Sc., M.A.Sc., Ph.D., F.R.S.A., Chemistry (1986)
Edward E. Owen, B.A., M.A., Ph.D, Social and Natural Sciences (1987)
Robert W. Payne, B.A., Ph.D., Psychology (1991)
G. Neil Perry, B.A., M.P.A., A.M., Ph.D., LL.D., Public Administration (1977)
Howard E. Petch, B.Sc., M.Sc., Ph.D., D.Sc., LL.D., F.R.S.C., Physics and Astronomy (1990)
Sydney G. Pettit, M.A., History (1972)
Diana M. Priestly, B.A., LL.B., M.L.L., Law (1987)
Kenneth W. Rankin, M.A., Ph.D., Philosophy (1985)
Dolores Reventlow, B.A., Ph.D., Hispanic and Italian Studies (1983)
Reginald H. Roy, C.D., B.A., M.A., Ph.D., F.R.Hist.S., History (1988)
Roger A. Ruth, B.S., M.S., Ph.D., Psychological Foundations in Education (1987)
M. Harry Scargill, B.A., Ph.D., Hon. LL.D., Linguistics (1981)
Marion A. Small, B.Ed., M.Ed., Art and Music Education (1986)
H. Paul Smith, B.A., M.Ed., M.A., Ph.D., Mathematics (1986)
George Steggles, M.A., N.D.D., A.T.C., Art and Music Education (1988)
Harry M. Sullivan, B.Sc., M.Sc., Ph.D., Physics (1986)
Robert Swailes, B.S.A., M.Ed., Social and Natural Sciences (1986)
Neil A. Swainson, B.A., B.Ed., M.A., Ph.D., Political Science (1985)
Hugh Taylor. B.A., M.Ed., Ed.D., Psychological Foundations in Education (1987)
Margaret M. Travis, M.Sc., D.Ed., Art and Music Education (1989)
Fred T. Tyler, B.Sc., M.A., M.Ed., Ph.D., Education (1973)
Margery M. Vaughn, L.R.S.M., Mus.G., B.Mus., M.Litt., Ed.D., Art and Music Education (1986)
Jean-Paul Vinay, L. ès L., M.A., Agrégé de l'Un., Officier d'Académie, D.Litt., F.R.S.C., Ch. de la Légion d'Honneur, Linguistics (1976)
Robert T.D. Wallace, M.A., LL.D., Mathematics (1971)
Henry J. Warkentyne, B.A., M.A., Ph.D., Linguistics (1991)
Roy E.L. Watson, B.A., M.A., Ph.D., Sociology (1989)
William D. West, Theatre (1985)
Charles R. Wicke, B.A., M.A., Ph.D., History in Art (1988)
Rudolph A. Wikkramatileke, B.A., M.A., Ph.D., Geography (1986)
Robin Wood, F.R.A.M., LL.D., Music (1990)

HONORARY DEGREE RECIPIENTS, 1990

Marie-Claire Blais, Hon.D.Litt., November 1990
Kay Elizabeth Davies, Hon.D.Sc., June 1990
Rhys Tudor Eyton, Hon.LL.D., June 1990
Dorothy Livesay, Hon.D.Litt., June 1990
Edward Samuel Rogers, Hon. LL.D., June 1990

David William Schindler, Hon.D.Sc., October 1990
Allen Vandekerkhove, Hon.LL.D., June 1990
Margaret Ruth Vickers, Hon.LL.D., October 1990
Blossom Temkin Wigdor, Hon.D.Sc., October 1990
Bryan Williams, Hon.LL.D., June 1990
Michael Collard Williams, Hon.LL.D., November 1990

STATISTICS

ENROLLMENT 1990-91 AS OF NOVEMBER, 1990

(Figures for 1989-90 are in brackets)

Faculty of Arts and Science - Full Time*		
First Year	1329	(1335)
Second Year	1354	(1322)
Third Year	1226	(1077)
Fourth Year	861	(783)
Unclassified as to year	72	(91)
Total in Faculty	4842	(4608)
Faculty of Education - Full Time*		
First Year	—	(—)
Second Year	228	(186)
Third Year	299	(269)
Fourth Year	287	(234)
Fifth Year	275	(223)
Sixth Year	18	(20)
Unclassified as to year	8	(22)
Total in Faculty	1115	(954)
Faculty of Engineering - Full Time*		
First Year	139	(99)
Second Year	112	(88)
Third Year	111	(98)
Fourth Year	194	(164)
Total in Faculty	556	(449)
Faculty of Fine Arts - Full Time*		
First Year	186	(215)
Second Year	181	(199)
Third Year	181	(180)
Fourth Year	167	(150)
Unclassified as to year	12	(3)
Total in Faculty	727	(747)
Faculty of Human and Social Development - Full Time*		
First Year	—	(1)
Second Year	36	(36)
Third Year	160	(153)
Fourth Year	108	(125)
Unclassified as to year	3	(0)
Total in Faculty	307	(315)
Faculty of Law - Full Time*		
First Year	100	(106)
Second Year	90	(101)
Third Year	85	(85)
Unclassified as to year	4	(3)
Total in Faculty	279	(295)
Total full time undergraduates*	7,826	(7,368)
Total part time undergraduates	4,802	(4,550)
Total Undergraduates	12,628	(11,918)
Faculty of Graduate Studies		
Full time	1,138	(1,069)
Part time	270	(271)
Total in Faculty	1,408	(1,340)
Grand Total	14,036	(13,258)

FULL TIME STUDENTS OF NON-B.C. ORIGIN 1990-91

Determined by location of previous educational institution attended. (Figures for 1989-90 are in brackets.)

Alberta	412	(407)
Saskatchewan	62	(59)
Manitoba	48	(43)
Ontario	255	(216)
Quebec	25	(22)
New Brunswick	6	(6)
Nova Scotia	17	(15)
Prince Edward Island	2	(2)
Newfoundland	1	(0)
Northwest Territories	11	(9)
Yukon	20	(28)
Other Countries	421	(416)
Total	1,280	(1,223)

DEGREES CONFERRED 1989-90

B.A. — 715; B.Ed. — 304; B.Eng. — 38; B.F.A. — 82; B.Mus. — 30; B.Sc. — 328; B.S.N. — 115; B.S.W. — 59; LL.B. — 108; M.A. — 74; M.A.Sc. — 5; M.Ed. — 133; M.F.A. — 6; M.Mus. — 4; M.P.A. — 39; M.Sc. — 29; Ph.D. — 37.
TOTAL — 2106.

PERMANENT BUILDINGS ON THE UNIVERSITY CAMPUS

Student Union Building (1962); addition 1976
Clearihue Building (1962); Classroom-Office Extension (1971); Third Wing (1976); Fourth Wing (1979)
Cornett Building (1966)
Elliott Building (1963); Lecture Wing (1964)
Craigdarroch Residence Buildings (1964); additions 1966, 1967 , 1973, 1981)
Campus Services Building (1965)
McLaurin Building (1966)
Music Wing (1978)
McPherson Library (1964); addition (1973)
Centennial Stadium (1967)
Sedgewick Building (1968); additions (1969, 1970)
Cadboro Commons/Craigdarroch Office Building (1969)
Lansdowne Residence Buildings (1969)
Cunningham Building (1971)
Saunders Building (1974)
McKinnon Building (1975)
University Centre (1978)
Visual Arts Building (1978)
Gordon Head Residence Buildings (1978)
Begbie Building (1980)
Phoenix Building (1981)
McGill Residence Buildings (1981)
Petch Building (1985); Engineering Office Wing (1990)

* Undergraduates registered in 12 units or more.

Source: University of Victoria Registration Statistics 1990-91 as of November, 1990

INDEX I - FACULTY MEMBERS AND ADMINISTRATIVE AND ACADEMIC PROFESSIONAL STAFF

NOTE: Since the University Calendar goes to press in the spring, this list and lists under faculties and departments may be subject to some modification when the academic session begins.

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Administration	Sedgewick	B-3
Administration Stores	Campus Services	C-2
Administrative Registrar	University Centre	C-3
Admission Services (Undergraduate)	University Centre	C-3
Admission Services (Graduate)	University Centre	C-3
Admission Services (Law)	Begbie	A-3
Advising Centre (Arts & Science)	Clearihue	C-3
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Alumni Association	University House 1	E-4
Anthropology	Cornett	B-3
Arts & Science (Deans' Offices)	Clearihue	C-3
Athletics & Recreational Services	McKinnon	C-2
Audio-Visual & Television Services	McPherson Library	C-3
Biochemistry & Microbiology	Petch	C-4
Biology	Cunningham	C-4
Board of Governors	University House 1	E-4
Bookings	University Centre	C-3
Bookstore & Campus Shop	Campus Services	C-2
Buildings & Grounds	Saunders	D-2
Business & Industry Development Centre	Campus Services	C-2
CFUV Radio	Student Union	D-3
Campus Planning	Saunders	D-2
Centre for Asia-Pacific Initiatives	Begbie	A-3
Centre for Earth & Ocean Research	Elliott	C-4
Ceremonies & Special Events	University House 2	E-4
Chancellor	University House 1	E-4
Chapel	Chapel	A-4
Chaplains	University Centre	C-3
Chemistry	Elliott	C-4
Child and Youth Care	Sedgewick	B-3
Cinecenta Theatre	Student Union	D-3
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Computer Science	Engin. Office Wing	C-4
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Conference Services	Craigdarroch Office Building	D-3
Cooperative Education Programs	Campus Services	C-2
Counselling Services	University Centre	C-3
Creative Writing	Clearihue	C-3
Curriculum Laboratory	MacLaurin	B-4
Day Care Services	Day Care Centre	D-1
Development Office	University House 3	E-4
Economics	Cornett	B-3
Education	MacLaurin	B-4
Electrical and Computer Engineering	Engin. Office Wing	C-4
Engineering Coop	Engin. Office Wing	C-4
Engineering (Dean's Office)	Engin. Office Wing	C-4
English	Clearihue	C-3
Environmental Studies Program	Clearihue	C-3
Extension Division (See University extension)		
Faculty Association	University Centre	C-3
Faculty Club	Faculty Club	A-3
Felicita's Lounge	Student Union	D-3
Fine Arts (Dean's Office)	MacLaurin	B-4
Food Services	Cadboro Commons	D-3
French Language & Literature	Clearihue	C-3
Geography	Cornett	B-3
Germanic Studies	Clearihue	C-3
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History in Art	Clearihue	C-3
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Institute for Research on Public Policy		
Institutional Analysis		
LACIR (B.C. Advanced Systems Institute)		
Language Centre		
Law		
Learning & Teaching Centre		
Library		
Linguistics		
Mail & Messenger Services		
Malahat Review		
Maltwood Art Museum & Gallery		
Map Library		
Martlet		
Mathematics and Statistics		
Mechanical Engineering		
Music		
National Coaching Institute		
National Research Council		
Network & Technical Services		
Nursing		
Occupational Health & Safety		
Pacific & Asian Studies		
Personnel Services		
Philosophy		
Phoenix Theatres		
Physical Education, Athletics & Recreational Facilities		
Physics and Astronomy		
Political Science		
Post Office		
President and Vice Chancellor		
Printing & Duplicating Services		
Psychology		
Public Administration		
Public Relations & Information Services		
Purchasing Services		
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Research Administration		
Residences		
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Social Work		
Sociology		
Software Development		
Statistics Laboratory		
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Student Financial Aid		
Supply & Technical Services		
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University Centre Auditorium		
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University House-1		
University House-2		
University Secretary (Registrar)		
University of Victoria Students' Society		
Students'Society Ombudsperson		
Vice Presidents, Academic and Administration		
Development & External Relations		
Vice President, Finance		
Visual Arts		
Women's Studies		
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3771 Haro Rd.		E-4
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Sedgewick		B-3
Sedgewick		B-3
Clearihue		C-3
Sedgewick		B-3
Clearihue		C-3
Phoenix		A-4
McKinnon		C-2
Elliott		C-4
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MacLaurin Music Wing		B-4
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Sedgewick		C-3
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Cornett		B-3
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Sedgewick		B-3
Phoenix		A-4
Saunders		D-2
Student Union		D-3
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University Centre		C-3
3815 Haro Rd.		E-4
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Sedgewick		B-3
Student Union		D-3
Student Union		D-3
Sedgewick		B-3
University House 1		E-4
University Centre		C-3
Visual Arts/M Building		D-1
Clearihue		C-3

VISITOR PARKING:

DAYS (7:00 a.m.-6:00 p.m.), MONDAY THROUGH FRIDAY (Statutory Holidays Excluded)

Surface Parking:
Hourly: Limited metered space available in most lots. See symbol (M) on map.
Daily: Purchase permit at this Directory and park in an unreserved space in any numbered lot outside Ring Road.

Covered Parking:
Parking below University Centre. Terms and rates are posted inside Parkade.

EVENINGS (6:00 p.m.-7:00 a.m.), WEEKENDS AND STATUTORY HOLIDAYS.

Surface Parking:
No fees required.
Park in any lot except "B" and reserved parts of "6" and "D". No restrictions weekends and Statutory Holidays.

Covered Parking:
Parkade below University Centre. Terms and rates are posted inside Parkade.

(ARC)
LE3
V4
Suppl

UNIVERSITY OF VICTORIA

1991-92

Calendar Supplement

This supplement contains amendments and corrections (obvious typographical errors excepted).

Page 4 **Sessional Calendar**, February 1992. The date of the Awards Recognition Ceremony should be Wednesday, 12 February 1992.

Page 21 **Revised Fees.** Paragraph 2(b), add:

	credit units	fee units
FA 315 (F50)	1.5	4.6
CYC 360 (F50 & 51) & (Q50 & 51)	1.5	2.4

Faculty of Arts and Science

Page 111 **Linguistics:**
LING 395 instructor: B.P. Harris
LING 396 instructor: H. Noro
LING 410C offered in the fall (F)
LING 451 offered in the spring (S)

Page 141 **Psychology** (second year and above):
1. Students may ignore the recommendation that they take no more than 6 units of second year psychology courses in any one winter session.
2. All students who are entering **second year or above** in fall 1991 should consult last year's Calendar for regulations affecting students in Psychology; this year's new regulations apply only to students entering their first year of studies at UVIC in 1991.

Page 149 **Sociology**: SOCI 382 (1-1/2)

Faculty of Education

Page 152 **Faculty and Other Officers**, add:
Sachiko Kiyooka, B.A.(U. of Vic.), Advising Assistant.

Page 165 **B.Ed.(Secondary Curriculum)**, Teaching Area - English, under "Area", add:
ENGL 434 ..... 3 units

Faculty of Graduate Studies

Page 256 **Education**, revised course entries:

ED-B 546 (1-1/2) INTERPRETATION AND ANALYSIS OF LANGUAGE ARTS RESEARCH
A critical review of research methodologies used in the general area of language arts. Consideration of the appropriateness of specific methodologies to research in classroom problems.

ED-B547 (3) ISSUES IN ENGLISH EDUCATION IN THE SECONDARY GRADES
An extensive critical examination of issues in the learning and teaching of English in the secondary grades. (Pre-or corequisite: 541 or consent of instructor)

Delete Ed-B 548, 549, 550.

Page 271 **History in Art.** Delete note on grading for HA 690. Add: HA 695(0) COMPREHENSIVE EXAMINATION (Grading: COM, N or F)

Page 272 **Linguistics:**
LING 503 instructor: L. Saxon
LING 515 line 2:...topic in phonological...

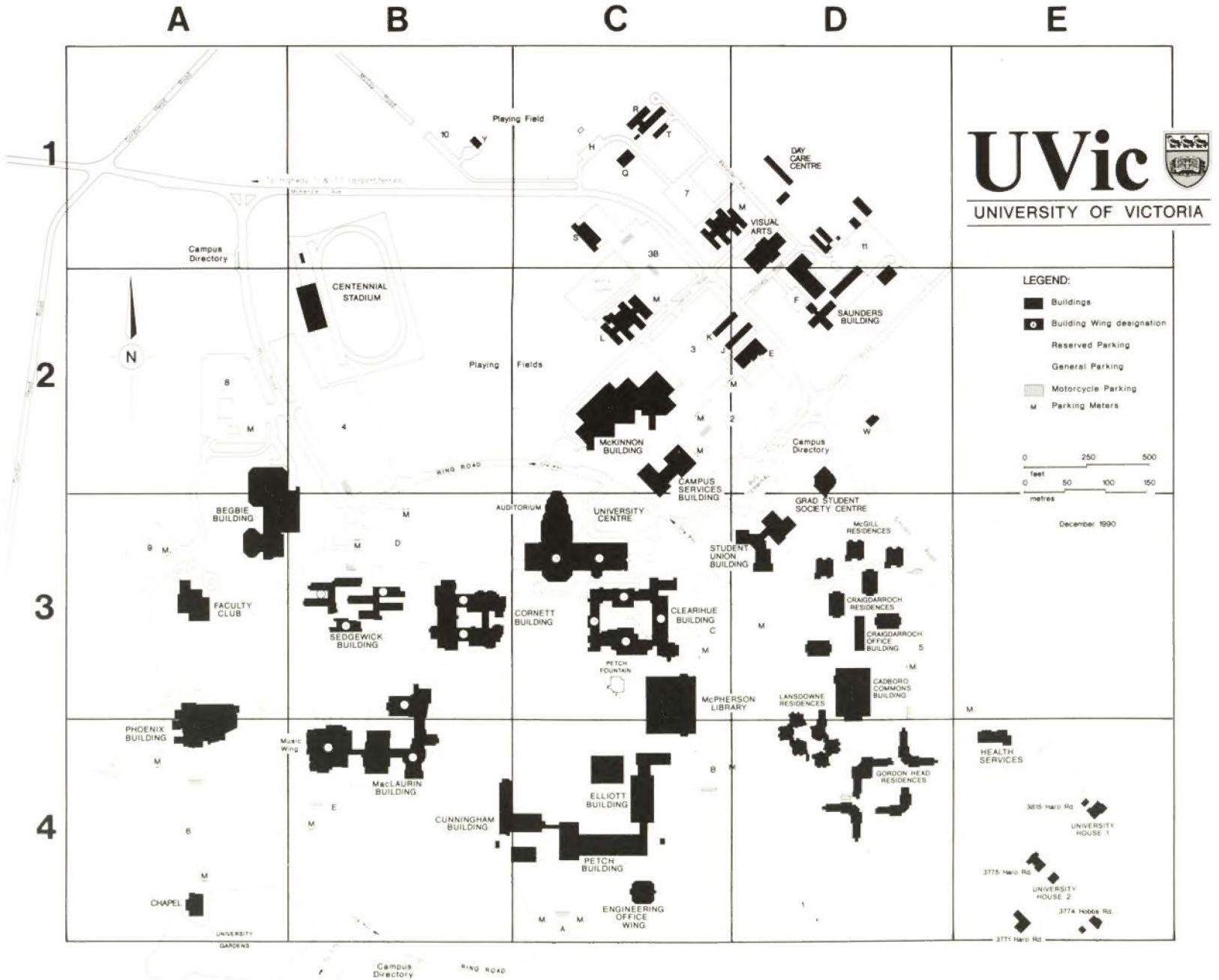
Page 293 Add:

CENTRE FOR SUSTAINABLE REGIONAL DEVELOPMENT

The Centre for Sustainable Regional Development (CSRD) at the University of Victoria is a research centre supporting interdisciplinary work on environmental, economic, institutional, social and cultural sustainability. It provides information on sustainable development and its applications to users in the region, in the nation and internationally.

The Centre includes researchers from the three divisions of the Faculty of Arts and Science; the Faculties of Law and Engineering. It offers expertise on environment/development issues to governments, research institutions and the private sector. It maintains close ties with provincial government ministries, the British Columbia Round Table on the Environment and the Economy, and university, provincial and national institutes concerned with sustainable development in order to provide coordinated research programs and efficient and contemporary information management. The Centre is supported through direct contributions from the University, research funding and contract work.

The basic goals of the Centre are to provide an institutional focus for carrying out research, training and community service activities on sustainable regional development and to make the resources of the Centre available to communities and federal and provincial government ministries interested in sustainable development studies.


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UVic
UNIVERSITY OF VICTORIA
LEGEND:
Buildings
Building Wing designation
Reserved Parking
General Parking
Motorcycle Parking
Parking Meters
0 250 500
feet
0 50 100 150
metres
December 1990
N
Playing Field
DAY CARE CENTRE
VISUAL ARTS
SAUNDERS BUILDING
Campus Directory
CENTENNIAL STADIUM
Playing Fields
McKINNON BUILDING
CAMPUS SERVICES BUILDING
Campus Directory
GRAD STUDENT SOCIETY CENTRE
McGILL RESIDENCES
BEGBIE BUILDING
AUDITORIUM
UNIVERSITY CENTRE
STUDENT UNION BUILDING
FACULTY CLUB
SEDGEWICK BUILDING
CORNETT BUILDING
CLEARIHUE BUILDING
CRAIGDARROCH RESIDENCES
CRAIGDARROCH OFFICE BUILDING
PETCH FOUNTAIN
McPHERSON LIBRARY
LANSDOWNE RESIDENCES
CADBORO COMMONS BUILDING
PHOENIX BUILDING
Music Wing
MacLAURIN BUILDING
HEALTH SERVICES
GORDON HEAD RESIDENCES
ELLIOTT BUILDING
CUNNINGHAM BUILDING
3815 Hard Rd.
UNIVERSITY HOUSE 1
PETCH BUILDING
3775 Hard Rd.
UNIVERSITY HOUSE 2
3774 Hobbs Rd.
ENGINEERING OFFICE WING
CHAPEL
UNIVERSITY GARDENS
3771 Hard Rd.
Campus Directory
Ring Road